68-1902

REPORT ON DIETING OF PAUPER LUNATICS IN ASYLUMS AND LUNATIC WARDS OF POOR-HOUSES IN SCOTLAND, by DR. J. C. DUNLOP.

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SUPPLEMENT

TO THE

FORTY-THIRD ANNUAL REPORT

OF THE

GENERAL BOARD OF COMMISSIONERS IN LUNACY FOR SCOTLAND.

Presented to both Houses of Parliament by Command of His Majesty.

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FORTY-THIRD ANNUAL REPORT.

TO THE RIGHT HONOURABLE

LORD BALFOUR OF BURLEIGH,

His Majesty's Secretary for Scotland.

GENERAL BOARD OF LUNACY,
EDINBURGH, 24*th January*, 1902.

MY LORD,

We have the honour to lay before you as a Supplement to our Forty-third Annual Report, and in accordance with the intention therein expressed, a Report furnished to us by Dr. James Craufurd Dunlop, Edinburgh, on the Dieting of Pauper Lunatics in Asylums and Lunatic Wards of Poorhouses in Scotland.

The Board are glad to observe that in the great majority of institutions the diets may be regarded as satisfactory, and that there are only a few cases in which they can be said to fall considerably short of the scientific standard adopted by Dr. Dunlop.

While the Board have no desire to suggest absolute uniformity in dietaries, they do not doubt that a careful study of this Report will suggest still further improvements in the dieting of the insane in our institutions.

We have the honour to be,

MY LORD,

Your most obedient humble Servants,

WALTER G. SCOTT, *Chairman.*
JOHN COWAN.
JOHN CHEYNE.
JOHN FRASER.
JOHN MACPHERSON.

T. W. L. SPENCE,
Secretary.

REPORT

TO THE

GENERAL BOARD OF LUNACY FOR SCOTLAND

ON THE

DIETING OF PAUPER LUNATICS IN ASYLUMS AND LUNATIC WARDS OF POORHOUSES IN SCOTLAND.

BY

JAMES CRAUFURD DUNLOP,

M.D., F.R.C.P., Edin.

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REPORT TO THE GENERAL BOARD OF LUNACY FOR SCOTLAND ON THE DIETING OF PAUPER LUNATICS IN ASYLUMS AND LUNATIC WARDS OF POORHOUSES IN SCOTLAND.

I have the honour to submit to the Board my report on the dieting of pauper lunatics in Asylums and Lunatic Wards of Poorhouses in Scotland.

In the month of March, 1900, in compliance with instructions issued by the Board, a record was made of the actual issues of food in all asylums and poorhouses where pauper lunatics are treated, and the result of these records, together with details of the dietary regulations of the institutions, were returned to the Board on prescribed schedules. It is on the statements incorporated in these schedules that my report is founded. I have examined the schedules critically; and by correspondence in some cases, and by visits to the institutions in others, have satisfied myself that the facts recorded in them are reasonably correct. A copy of one of these schedules as filled up is given later. To save space copies of the others are omitted, and only the main facts stated.

In the report I shall give:—

1. Composition of those foodstuffs found to be used in asylum dietaries.
2. Tests for deciding the sufficiency and suitability of the diets.
3. A copy of a schedule as issued and filled up.
4. Details of, and remarks on, the dietaries of all asylums and poorhouses in Scotland where pauper lunatics are received.
5. General remarks on results got by the application of the tests referred to.
6. Suggestions for ensuring that all pauper lunatics are sufficiently and properly fed.

I. COMPOSITION OF FOODSTUFFS.

The large number of diets and the large number of foodstuffs in use made individual analysis of the foods and dishes a practical impossibility, and consequently I have utilised reliable average analyses. In the following Table the figures used in preparing this report are shown. The majority are taken from Bulletin 28, U.S. Board of Agriculture, Office of Experimental Station (Revised Edition), and some are from private analyses.

Animal Food.

	Composition.		
	Proteid.	Fat.	Carbo-hydrate.
Beef, forequarter	18.3	18.9	—
,, hindquarter	19.3	18.3	—
,, sides	18.8	18.8	—
,, ribs	14.4	20.0	—
,, heads, hough, &c.	9.7	3.9	—
,, liver	20.7	4.5	1.5
,, heart	16.0	20.4	—
,, tripe	14.1	3.1	—
,, tinned	26.3	18.7	—
Mutton, sides	13.0	24.0	—
,, tinned	28.8	22.8	—
,, pluck (as liver)	23.1	9.0	5.0
Pork	12.0	29.8	—
Ham	14.5	33.2	—
Cod, fresh	16.7	.3	—
Haddock, fresh	17.2	.3	—
,, Findon	23.3	.2	—
Herring, fresh	11.2	3.9	—
,, red	20.5	8.8	—
Stock fish	27.3	.3	—
Suet	4.7	81.8	—
Lard	—	100.0	—
Dripping	—	97.7	—
Margarine	1.2	83.0	—
Butter	1.0	85.0	—
Eggs	11.9	9.3	—
Milk, whole	3.3	4.0	5.0
,, skimmed	3.4	.3	5.1
,, butter	3.0	.5	4.8
,, condensed	8.8	8.3	54.1
Cheese	27.7	36.8	4.1

VEGETABLE FOOD.

	Composition.		
	Proteid.	Fat.	Carbo-hydrate.
Bread, white	9.2	1.3	53.1
„ brown	5.4	1.8	47.1
Buns	6.3	6.5	57.3
Oatmeal	16.1	7.2	67.5
Flour	11.4	1.0	75.6
Peas	24.6	1.0	62.0
Beans	22.5	1.8	59.6
Lentils	25.7	1.0	59.2
Barley	8.5	1.1	77.8
Rice	8.0	.3	79.0
Sago	9.0	.4	78.1
Tapioca	.4	.1	88.0
Cornflour	7.1	1.3	78.4
Sugar	—	—	100.0
Syrup and treacle	—	—	69.3
Jam and marmalade	.6	.1	84.5
Potatoes	1.8	.1	14.7
Fresh vegetables (as cabbage)	1.4	.2	4.8
Currants	2.4	1.7	74.2
Raisins	2.3	3.0	68.5
Apples	.3	.3	10·8

CONDIMENTS.

	Composition.		
	Proteid.	Fat.	Carbo-hydrate.
Tea	—	—	—
Coffee	—	—	—
Coffee Essence	—	—	—
Cocoa	21.6	28.9	37.7
Ginger	—	—	—
Pepper	15.5	8.5	63.0
Beer*	.5	—	11.5

For convenience, and to facilitate comparison of the results with standards, the quantities of foodstuffs used have all been converted into grammes or cubic centimetres, and the quantities of food principles are similarly expressed as grammes. The energy values of the diets are expressed as Calories, the large Calorie, which is the amount of heat necessary to raise the temperature of one litre of

* The isodynamical value of alcohol is included in carbo-hydrate value. (Bul. 75, U.S. Department of Agriculture Office of Experimental Stations, page 17.)

water one degree centigrade, being taken as the convenient standard. Rübner's formulæ have been used in estimating these energy values.

II. TESTS FOR DECIDING THE SUITABILITY OF THE DIETS.

1. *The Energy Value.*

The two most important functions of food are to supply material for the repair and growth of tissue, and to supply the energy necessary to sustain life and do work. The former is a special function of the proteids of the food, the latter is a function common to all three organic food principles. Of these two great functions the latter is the one which up to the present time has been more thoroughly examined, and consequently is the first which will here be used as a test of sufficiency.

Our present knowledge of the requirement of energy by the human subject points to that requirement being a definite quantity, influenced very slightly if at all by individual variation, but varying through wide limits according to physiological law. As proof of this assertion I can advance three arguments:— (1) That it is the general opinion of all authorities on the scientific aspects of dietetics, such as Atwater, Von Voit, König, and Von Noorden; (2) that it has been found by dietary studies that there is a great similarity in the food value of the diets of labouring men living on very different dietaries in widely distant towns and countries; and (3) that if a number of men of different individual character, but leading similar lives, be fed by a rigidly fixed diet, and that diet be even slightly altered, the effect on the well-being of the men is practically universal. A comparison between the dietaries of the labouring men of different countries will be found in Atwater's "Investigations on the Chemistry and Economy of Food," Bul. 21, U.S. Department of Agriculture, Office of Experimental Stations, and in Paton, Dunlop, and Inglis' "Study of the Diet of the Labouring Classes in Edinburgh," Schulze & Co., Edinburgh, 1901. A record of the effects of the alteration of a regulation diet on a number of men is to be found in a paper on "Food Requirements of Varying Labour" communicated by me to the International Medical Congress, Paris, 1900, and published in the Scottish Medical Journal of May, 1901.

The more important physiological factors influencing food requirement are sex, work, size, and age. These should all be considered when stating a standard energy requirement for asylum dietaries. I shall first give my opinion as to that standard for adult male working patients of average size, and afterwards state how the various factors influence that standard.

For dietary purposes the male working lunatic may be considered as an able-bodied man doing a moderate day's work. It appears from the schedules that in most asylums the working male patient is employed about six or seven hours a day at agricultural or

other manual labour, and although such a day's work does not amount to the severity of some forms of the free man's labour, yet it certainly amounts to what may fairly be considered moderate labour. The standard of energy value necessary for these working male pauper lunatics is consequently the same as that found to be necessary for moderate labourers, which according to Atwater* is 3500 calories. Smaller standards have been advanced as sufficient for moderate labour, but because Atwater's observations are not only the most recent but also the most extensive yet published, and because I have been able to satisfy myself of the accuracy of his standards† I feel justified in adopting his figure as the necessary standard of energy value of the food of the working male pauper lunatic.

But with the influencing factors already enumerated it would not be right to use that standard for all male patients. Excess of work, idleness, exceptional size, and extremes of age all must be considered.

Hard work certainly requires more food than this standard. It has been shown that a dietary worth 4000 or 4500 calories is necessary for such work. From the detail of the schedules it is impossible to estimate what addition should be made to the standard for unusually severe work; but from the fact that work heavier than the average is occasionally undergone by pauper lunatics, it is necessary to bear in mind that a standard of 3500 calories, which is an energy value sufficient for moderate labour, is not necessarily sufficient for each working man at all times. The returns show that this is no new principle in asylum dietaries; in several asylums extra food is reported as being given during the harvest and other times when the labour is more severe than usual.

Inability or unwillingness to work is a factor which influences the average diet of lunatic asylums more than the excess of work. Atwater's standard for the idle, *i.e.* a man doing no work and taking no exercise, is 2700 calories, but of such the number in asylums dieted by the ordinary scale is presumably so small that they may be left out of account. Atwater's light labour standard, the standard for sedentary labour, for gentle exercise, &c., is 3100 calories, and this may be taken as the standard for those pauper patients who are not engaged in the more active employments, but who have exercise and may do some light work. For convenience, in this report they are spoken of as idlers.

The amount to which this influencing factor may be taken into account depends on the relative numbers of working and idle patients in asylums. The following Table is prepared from figures stated in the schedules; in it patients are grouped as working when they are employed at outdoor work on farm garden, &c., or in workshops, laundries, kitchens, or sewing rooms. Only patients dieted by the ordinary scales are included. It will be seen in the Table that 56 per cent. of the patients dieted by the ordinary scales are workers, and that 44 per cent. are idlers.

*U.S. Department of Agriculture Office of Experimental Stations, Bulletin 21.

† "Food Requirements of Varying Labour." Scottish Medical and Surgical Journal, May, 1901.

TABLE SHOWING RELATIVE NUMBERS OF WORKING AND IDLE MALE PAUPER PATIENTS.

	Total Number.	Number Returned as Workers.	Per cent. Working.
Royal Asylums . . .	997	610	61
District Asylums . . .	3,156	1,637	52
Parochial Asylums . . .	320	217	67
Lunatic Wards . . .	418	291	69
Total . . .	4,891	2,755	56

Taking the number of idle patients at half of the total number of patients, the energy value of the average must not be reduced to less than 3300 calories. Such an average diet, if properly divided, would allow of a diet worth 3500 calories for the half of the patients who are working, and a diet worth 3100 calories to the other half who are idle.

With a reduction from a standard sufficient for all patients, one proviso is essential, and that is, that the food must be so divided that workers get more than idlers, for without that the workers would be insufficiently and the idlers excessively fed. There are at least two means of doing this, the one to allow some food at meal times *ad libitum*, the other to make the ordinary rations of all sufficient for idlers only, and give extra rations to workers. Both appear to be used in asylums, and provided they are properly carried out they are equally good. A combination of the two is probably the best means of ensuring a correct division of the food.

The size of the individual as a complicating factor would have to be considered were individual rations the point at issue, but when it is an average diet which is being discussed, it need not necessarily be allowed for. Direct observation has shown that the average size of the lunatic pauper in the various asylums is fairly constant. Patients of exceptional size are met with, but they are nowhere so numerous as to materially influence the average. Allowance for large patients should be made in the distribution of food, but is unnecessary in fixing the average diet.

Age as a complicating factor in fixing a standard is of importance when the extremes are dealt with. Juveniles and aged persons require less food than ordinary adults. For juveniles there is no occasion to make allowance, for their number in the asylums is so small that they cannot materially affect the average diet. Aged patients are a factor which should be considered, but for want of sufficient scientific information it is impossible to properly estimate for them. The fact that these aged persons require less food than

younger adult patients, and that they have not been specially allowed for, prevents the standard of average requirement being rigidly applied. The presence of many aged inmates would warrant the reduction of the average diet. Direct observation shows that the average age of the pauper inmates in asylums varies but slightly, for in 36 out of the 39 institutions included in this report the average age is between 40 and 50.

Females, for at least two reasons, require less food than males. The one reason is that their average size is smaller, the other is that proportionally to their weight they have less active tissue, muscle, than males. Atwater's estimate of their requirement is at four-fifths of that of a man, and his estimate is generally accepted as correct. Using that figure, the standard for women may be taken as 2800 calories for workers, 2500 calories for idlers, and an average diet of 2650 calories in asylums where half are workers and half are idlers and where the individual rations are not fixed. As to the influence of women of exceptional size and of old age, little need be said further than that with them, as with men, the presumption is that exceptional sizes should balance themselves, and that it is impossible to make a fair deduction for the presence of old women.

From these remarks as to the necessary energy value of asylum dietaries it may be concluded:—

1. That the requirements of male and female patients are different, and that an equal diet for the two sexes would be faulty. Such a diet must entail either under-feeding or waste.
2. That the average male asylum dietary should have an energy value of 3300 calories.
3. That the diet for working male patients should have an energy value of 3500 calories.
4. That the diet of comparatively idle male patients should have an energy value of 3100 calories.
5. That the average female asylum dietary should have an energy value of 2650 calories.
6. That the diet for the working female patients should have an energy value of 2800 calories.
7. That the diet of comparatively idle female patients should have an energy value of 2500 calories.

2. *The Proteid Value.*

The question of what is the requisite amount of proteid to maintain health has been largely studied, but so far no very definite conclusion has been arrived at. Voit fixed the standard proteid requirement at 118 grms. per diem for a man at moderate labour, and his standard has been upheld by many subsequent observers, including Atwater. Other observers, notably Hirschfeld, Kumagawa, and Pechsel, have advanced evidence that health can be maintained on a smaller amount of proteid. With such contradictory opinions it would not be right at present to apply any proteid standard very rigidly, but with the more general consensus of opinion being that at least 118 grms. are necessary,

that quantity will be here adopted as the standard for the male dietaries, the female standard being assessed at four-fifths of that, namely 94 grms.

A factor influencing this standard is the nature of the proteid taken, for there is great difference in the absorbability of the different varieties. Animal proteids as a class are well absorbed, vegetable proteids as a class are less perfectly absorbed, and some vegetable proteids, as for example those of peas, beans, and the husk of wheat, are very imperfectly absorbed. These differences may be allowed for in a general way by insisting on the standard being fully met when vegetable proteid is in excess, and allowing some relaxation of the standard when animal proteid is in excess.

To what extent the proteid standard should be increased to meet the requirements of the more severe forms of labour is also an uncertain point. It is well known that men in athletic training require a large amount of proteid, but such men are hardly comparable to lunatic patients. The athlete requires exceptional quantities of tissue-forming food, to encourage the growth and provide for the repair of muscle, and no very large amount of stored nutriment, as their exertion is not long sustained. The fully worked asylum patient wants not so much a large growth of muscular tissue as a large store of nutriment, and consequently the cases are not comparable. On general principles it may be stated that for severe work the patients require an all-round increase of food, and that with that all-round increase the proteid value of the diet should be proportionately increased.

In examining the diets, the use of a proteid standard will not be found of the same utility as the use of an energy-value standard, for as a matter of fact it is rarely found that a diet of sufficient energy value is deficient in proteid.

3. *The Amount of Fat and Carbohydrate in the Diets.*

The amount of fat and carbohydrate in a diet was at one time considered an important test for the sufficiency of the diet, but now that it has been clearly shown that the functions of these two food principles are identical, that they are both energy providers, and that their combined quantity can be best estimated in terms of energy, it is not now considered necessary to insist on any standard of each of these foods being in a diet. From the time when Playfair published his dietary studies, until recently, a fat standard and a carbohydrate standard have habitually been stated, but the more modern method, introduced by Atwater, of suppressing these and in terms of Rübner's formulæ expressing the energy value of the diet, is found more convenient and more reasonable.

One point in connection with the amount of carbohydrate must be considered, and that is that the total quantity of that food principle should not much exceed 550 grms. in a day's diet. The reason of this limitation is twofold, in the first place carbohydrate-containing food is more bulky food than fatty food, and there is a limit to the total bulk of a diet, and in the second place, it is generally allowed that excess of carbohydrate, be it sugar or be

it starch, is apt to cause disorders of digestion. With this limitation, it follows that when a diet has to be raised to a high energy value the increase should not be one of carbohydrate only, but of proteid and fat proportionally.

4. *The Average Weight of Patients.*

In addition to the dietary schedules already referred to, returns stating average age, height, length of residence, and weight of patient have been received from the institutions. To ensure uniformity of these returns, all patients not in regular employment, all patients over 70 years of age, and all patients who have not been in residence for at least one year were excluded, and all weighings were taken before breakfast, the patients wearing their ordinary clothing, except boots and coats.

To use weight as a test of proper nourishment it is necessary to have some standard for comparison. In the following Table the standards of Hutchison* and Wells,† and the averages found in Scottish asylums are shown.

Height.	Hutchison's Standard.	Wells' Standard.	Asylum Average.	Number of Institutions in Average.
Inches.	*Lbs.*	*Lbs.*	*Lbs.*	
63	133	141	131	1
64	139	144	138	4
65	142	148	140	19
66	145	152	145	12
67	147	157	151	3

In the Table it may be seen that the average weight of the patients is found to fairly closely agree with Hutchison's standard, and consequently it may be inferred that the averages found may themselves be fairly used as standards. Wells' standards are based on an enormous number of weighings; their inclusion in the Table is instructive, as they show that Hutchison's standards and the asylum averages are not excessive. The asylum averages as stated in the above Table are adopted as the standard of weight for use in this report.

5. *Other Tests.*

In addition to these four tests which I have selected as the most important, there are other points which may be considered essential for a good diet, and which consequently may also be used as tests. Among these are a proper division of the diet into meals,

* "Encyclopædia Medica"—article "Life Insurance," Edinburgh, 1901.

† Green's "Life Insurance." New York, 1901.

proper variety of food, a proper use of condiments, and a proper use of antiscorbutic food.

The importance of a proper division of the food into meals is obvious. Were a pittance only given for two meals and excess for a third, there would inevitably be a waste at the full meal, and though the daily average appeared good, the diet would in reality be short. For institution feeding it is essential to have not only a daily sufficiency, but a sufficiency at each meal.

A proper variety of food is essential, a monotonous diet leads to a want of relish, and that is followed by a poorer digestion and absorption. The feeding of a man or animal has been compared to the stoking of an engine. The simile is a good one, both require energy, and both get that energy from the food or fuel supplied; but the use of the simile has a limit. The man is not the simple machine a steam engine is. There is the governing nervous mechanism to consider, there are the various functions connected with digestion and absorption which are not found in the simple machine. Allowance must be made for these complicating factors, and it has been found that variety of food is necessary.

The proper use of condiments is also essential for institution dietaries. The inmates of asylums are necessarily deprived of many of the more stimulating pleasures of life, and must tend to get into a more or less atonic condition. Such a condition would inevitably reduce the powers of assimilation and digestion, and to counteract that loss the use of condiments is essential. The same argument applies to the necessity of a proper and pleasing variety of food. The term "condiment" here is used in its wider significance as including not only mustard, pepper, ginger, and the like, but also tea, coffee, beer, and other tasty and stimulating beverages. It is, in fact, used as synonymous with the German term "Genussmittel."

The use of antiscorbutic food is at the present day hardly necessary to refer to, as its importance is invariably acknowledged and acted on. A good diet must have a sufficiency of fresh potato or other vegetable food to ensure a sufficiency of antiscorbutic properties.

From what has been said, the essential points of a good institution dietary may be summed up as follows :—

1. It must contain sufficient energy-producing food. Energy-value standards have been stated.
2. It must contain sufficient proteid.
3. It must not contain excess of carbohydrate.
4. There must either be a classification of patients both as to sex and work, or food allowed at discretion.
5. It must be divided into meals of reasonable amount.
6. It must be sufficiently varied and pleasing.
7. It must contain a sufficient allowance of condiments.
8. It must contain a fair allowance of potato or fresh vegetable.

III. A SCHEDULE AS SUBMITTED AND RETURNED.

The following shows the queries regarding dietary as issued to all asylums and the answers returned by one of them. The return

from Roxburgh District Asylum has been taken as an illustration. This return was selected on account of the very careful and complete manner in which it was filled up:—

Roxburgh District Asylum.

RETURN to the General Board of Lunacy regarding the Dietary of Pauper Patients in Scottish Lunatic Asylums, with special reference to the amount of Food supplied to Pauper Patients and to Private Patients receiving the same dietary as pauper patients, exclusive of patients on special diet, during the Four Weeks beginning Sunday, 4th March, 1900.

Numbers during Four Weeks beginning 4th March 1900.

	M.	F.
1. Daily average number of staff receiving food in Asylum,	13·	23·
2. Daily average number of patients of all classes,	136·4	158·0
3. Daily average number of pauper patients, and of private patients receiving the same food as pauper patients, *exclusive of patients of these classes on special diet,**	136·4	158·0
4. Daily average number of patients of the same class as those in Query 3, but excluded from the number returned in answer to that query because of receiving special diet on account of physical sickness, acute insanity, convalescence, &c.,	0	0

Patients on Special Diet.

5. Is there a specially fixed diet for patients on special diet, or is it ordered in special cases by the Medical Officers?—No. "Extras" are ordered, as required, by the Medical Officers.
6. If the former, state shortly the differences that exist between the fixed special dietary referred to and that of the ordinary chronic patients.—The "extras" consist of milk, bread, eggs, beef-tea, puddings, &c. During the four weeks the daily average number of patients receiving such extras (in addition to the ordinary dietary) was—Males, 74; females, 33.

Working Patients.

	M.	F.
7. How many patients are employed at outdoor work on the farm, garden, &c.?—Including Sundays,	47·	0
Excluding Sundays,	54·7	0
8. How many hours a day do such patients work?	6·	0
On Saturdays,	3·	0
9. How many patients are employed in workshops, laundries, kitchens, and sewing-rooms?—Including Sundays,	9·5	65·6
Excluding Sundays,	10·6	74·3

* The answers and returns for all the queries which follow are to be given in reference only to the patients included in the numbers given in answer to Query 3, unless when anything to the contrary is expressly stated or implied.

10. How many hours a day do such patients work? Males, 3 hours on Saturdays. (Laundry patients work nearly 7 hours daily, but 3½ on Wednesdays). — 6· — 6·

Breakfast.

11. What is the breakfast hour?—8 a.m.
12. How many patients work outside the wards in the early morning before breakfast? . . 5 — 10
13. Is any food given to these patients before sending them out to work?—No.
14. If so, state generally the kind and quantity of the articles of food given to the patients.
15. Daily Breakfast—

Name of Article.	Quantity per Patient.		*Price of Article.
	M.	F.	
Oatmeal, ...	7 oz.	5 oz.	£12 4s. ton
New milk, ...	½ pint	½ pint	9½d. gall.
Skimmed milk, . . .	—	—	—
Buttermilk, . . .	—	—	—
†Bread (wheaten), . .	8 oz.	6 oz.	1·103d. lb.
Bread (other kinds), . .	—	—	—
Butter, ...	½ oz.	½ oz.	11·464d. lb.
Margarine, . . .	—	—	—
Tea, ...	⅛ oz.	⅛ oz.	1s. 5d. lb.
Coffee, ...	—	—	—
Sugar, ...	½ oz.	½ oz.	1·901d. lb.
‡Milk, ...	·26 pint (cream).	·26 pint (cream).	9½d. gall.
§Flour, ...	—	—	—

	M.	F.
16. How many patients get porridge and milk only for breakfast?	83·9	70
17. How many get tea or coffee with bread and butter only?	35·5	30
18. How many get both porridge and milk with tea or coffee and bread and butter?‖ . . .	17·	58

The quantities for patients who get both are—

	Oatmeal.	Milk.	Bread.	Butter.	Tea.	Sugar.
	ozs.	pt.	ozs.	oz.	oz.	oz.
M. .	3½	½	8	½	⅛	¾
F. .	2½	½	3	¼	1/16	¼

Dinner.

19. What is the dinner hour?—1.15 p.m.
20. In the case of working patients employed outside the wards or at *constant* work within the wards, is any food given between breakfast and dinner?—Many male patients get lunch; all female patients get lunch.

* Where article is produced on Asylum Farm write "Farm" instead of price.
† Where bread is baked at Asylum give quantity used but not price.
‡ Milk used in tea or coffee only.
§ Where bread is not purchased give price of flour only, and state kind or kinds of flour used.
‖ If in any case tea or coffee and bread is given without butter, the fact to be stated.

21. If so, state generally the kind and the approximate quantities per patient.—Males (generally), bread, 4 ozs.; milk, ½-pint. Females (generally), bread, 1½ ozs.; milk, ½-pint. Laundry workers get—bread, 3 ozs.; cheese, 1 oz.; tea, ⅛ oz.; sugar, ½ oz.; milk, ¾ oz. (= ·26 pint).

22. Daily Dinner—

Days of Week.	* Menu.	†Quantity of each Article per Patient. M.	F.
		oz.	oz.
Sunday, . .	Rice soup (not limited), . . .	40	40
	Bread, ...	4	3
	Meat (fresh beef or mutton forequarter or salted pork), . .	8	8
	Potatoes (or turnips), . . .	12	12
Monday, . .	Barley broth (not limited), . .	40	40
	Bread, ...	4	3
	Meat (tinned Sydney mutton principally), ...	4	4
	Potatoes, ...	12	12
Tuesday, . .	Barley broth (not limited), . .	40	40
	Bread, ...	4	3
	Meat (fresh beef or mutton forequarter), ...	8	8
	Potatoes, ...	6	6
	Haricot beans, ...	1½	1½
Wednesday, .	Rice soup (not limited), . . .	40	40
	Bread, ...	4	3
	Dumpling (not limited), . . .	12	12
Thursday, .	Barley broth (not limited), . .	40	40
	Bread, ...	4	3
	Meat (fresh beef or mutton forequarter), ...	8	8
	Potatoes, ...	6	6
	Cabbage (not limited), . . .	6	6
Friday, . .	Fresh fish (haddocks), . . .	16	12
	Potatoes, ...	12	12
	Bread, ...	4	3
	Cheese, ...	1	1
Saturday, .	Pea soup (not limited), . . .	40	40
	Potatoes, ...	12	12
	Bread, ...	4	3

* Where a larger routine of dinner is given than can be comprehended within one week, they are to be detailed on separate sheets exactly following this form and in the order in which they are usually given.

† In all cases where the quantity of the cooked article is not limited, state "not limited," and give average quantity. Otherwise give exact quantities.

Butcher meat must be defined as "fresh," "salt," or "tinned," as "beef," "mutton," or "pork." The weight of all butcher meat is to be estimated uncooked and with bone, except in tinned meats. Further, the parts of the carcase used must be specified, thus—"Fresh beef hindquarter," "Fresh mutton forequarter," "Fresh beef, shank bones," &c., &c.

Fish to be sufficiently described thus, "fresh cod," "dried ling," &c. Weight to be estimated after cleaning and trimming, but before cooking.

Vegetables to be separately specified and defined as "green" or "dried," as "turnips," "cabbage," &c. Weight to be estimated after being cleaned and prepared for cooking.

23. Is the fresh butcher meat purchased or supplied by the Asylum Farm?—In both ways.
24. If in both ways, state precisely the method by which the supply to the Asylum from both sources is arranged and regulated.—The bulk of the supply is got by contract. This is supplemented by pork from the Asylum Piggery, and mutton from sheep which are bought, fattened, and killed in the autumn and winter season.
25. What is the average price per pound paid for (*a*) fresh beef 5d., (*b*) fresh mutton 6½d., (*c*) fresh pork 4¼d., (*d*) tinned mutton 5·333d., (*e*) tinned beef 4·714d., (*f*) fresh fish 2¼d., (*g*) salt fish 2·303d.
26. What kinds of fish are supplied?—Fresh haddocks as a rule; fresh herrings occasionally. Salt cod, ling, or tusk only when no fresh fish is procurable.
27. State as nearly as possible the quantities of the various ingredients in the following articles:—

		Quantity per Patient.
(1) Stewed Meat—		
* Butcher meat,		
† Vegetables,		
‡ Stock and fat,		
(2) Meat Pies—		
* Butcher meat,	Fresh beef (hindquarter mainly), uncooked and free from bone,	8 ozs.
‡ Stock and fat,		
† Vegetables,		
Pastry,	Flour, 4 ozs.; lard, 1½ ozs.	
(3) Irish Stew—		
* Butcher meat,	Cooked and free from bone, sometimes altogether or in part tinned beef, &c.,	4 ,,
Potatoes,	Peeled,	16 ,,
‡ Stock and fat,		
† Vegetables,	Turnips, carrots, onions, or leeks, varying with the seasons, to about	3 ,,
(4) § Scotch Broth—		
(*a*) ‡ Stock,	Fresh beef (forequarter principally),	4 ,,
(*b*) Barley,		1½ ,,
(*c*) Vegetables,	Cabbages, turnips, carrots, parsnips, parsley, onions, or leeks, varying with the seasons, from about	ozs. 2 to 7
	Whole peas,	½ oz.
(5) § Rice Soup— (*a*) ‡ Stock, (*b*) Rice, (*c*) Parsley, (*d*) † Vegetables,	Same as No. 4, rice taking place of barley.	
(6) Potato Soup— (*a*) ‡ Stock, (*b*) Potatoes, (*c*) † Vegetables,		
(7) Fish Soup— (*a*) ‡ Stock, (*b*) Fish, (*c*) † Vegetables,		

* Mention kind used.

† Specify each green or dried vegetable separately. Meal, flour, and other thickening substances to be entered separately.

‡ The kind of stock used to be definitely stated, thus—"Bones," "beef," "mutton," "pork," "ham," &c.

§ NOTE.—The beef boiled in the broth and soup is served as the ration of meat.

		Quantity per Patient.
(8) § Pea or Lentil Soup—		
(*a*) ‡ Stock,	Meat (beef, mutton, or pork),	4 ozs.
(*b*) Peas or lentils,	Split peas,	4½ ,,
(*c*) † Vegetables, green,	Turnips, carrots, parsnips, parsley, onions, or leeks, varying with the seasons, to about 3 ounces per ration.	
(9) Rice and Milk—		
(*a*) Rice,		3 ,,
(*b*) Milk,		10 ,, (½ pt.)
(*c*) Sugar,		¾ oz.
(*d*) Fat,		
(10) Stewed or baked Fruit—	Rice and rhubarb—	
(*a*) Fruit,	Rice,	3 ozs.
(*b*) Sugar,	Rhubarb,	16 ,,
	Sugar,	3 ,,
	Milk,	5 ,, (¼ pt.)
(11) Pastry—	Rhubarb tart—	
(*a*) Flour,		4 ozs.
(*b*) Lard,		1½ ,,
(*c*) Sugar,		3 ,,
(*d*) Rhubarb,		16 ,,
(12) Suet Pudding—	Dumpling—	
(*a*) Flour,		4 ozs.
(*b*) Bread crumbs,		
(*c*) Rice,		
(*d*) Raisins,		
(*e*) Currants,		½ ,,
(*f*) Suet,		1 ,,
(*g*) Treacle,		½ ,,
(13) Sauce with Fish—		
(*a*) Flour,		
(*b*) Butter,		
(*c*) Milk,		
Rice and syrup—	Rice, 3 ounces Syrup, 2 ,,	per ration.

Tea.

28. What is the tea hour?—6.15 p.m.

29. Is any food given to working patients between dinner and tea?—No.

30. If so, state generally the kind and approximate quantities of each article given to each patient.

† Specify each green or dried vegetable separately. Meal, flour, and other thickening substances to be entered separately.

‡ The kind of stock used to be definitely stated, thus—"Bones," "beef," "mutton," "pork," "ham," &c.

§ NOTE.—The beef boiled in the broth and soup is served as the ration of meat.

31. Daily Tea—

Name of Article.	Quantity per Patient.		* Price of Article.
	M.	F.	
Oatmeal,	7 oz.	5 oz.	£12 4s. ton.
New milk,	½ pint	½ pint	9½d. gall.
Skimmed milk,	—	—	—
Bread (wheaten),	8 oz.	6 oz.	1·103d. lb.
Bread (other kinds),	—	—	—
Butter,	½ oz.	½ oz.	11·464d. lb.
Margarine,	—	—	—
Tea,	⅛ oz.	⅛ oz.	1s. 5d. lb.
Coffee,	—	—	—
Sugar,	½ oz.	½ oz.	1·901d. lb.
†Milk,	·26 pint (cream).	·26 pint (cream).	9½d. gall.
Jam (jam, marmalade, etc., is given in place of butter occasionally), Marmalade,	1·163 oz.	1·163 oz.	Home-made.

* Where any article is exclusively produced on Asylum Farm put "Farm" in place of price.

† Used with tea or coffee only.

	M.	F.
32. How many patients get porridge and milk only?	27·5	23·5
33. How many get tea or coffee with bread and butter only?	108·9	134·5
34. How many get both porridge and tea or coffee with bread and butter?	0	0

Supper.

35. If supper is given after and in addition to tea, state the hour at which it is served, the number and kind of patients that partake of it, and the quantity in which each article composing the meal is distributed to each patient.—No regular supper is given, but at 7.30 some of the patients on "extras" get food as described in Answer 6.

General.

36. State what precautions (if any) are taken to secure (*a*) a uniform nutritive standard of the milk supplied to the Asylum, and (*b*) to ensure its freedom from infection or impurity.—(*a*) The milk is examined and tested in the usual practical ways. (*b*) No special precautions are taken. The milk is all got from one contractor, who supplies no other persons. His dairy is visited from time to time by the Medical Superintendent and the County Officers of Health.

37. Are all patients regularly weighed?—Yes.

38. If so, how often?—All recent and special cases once a fortnight; all others every three months.

39. How are their weights recorded for reference?—In "Weight Books" kept for the purpose, and in the Case Books.

Average Weekly Allowances.

40. State on the accompanying forms the average weekly allowance of food, during the four weeks beginning on Sunday, 4th March, 1900,

to those patients who are embraced in the answer to Query 3—that is, to pauper patients and private patients receiving the same diet as pauper patients, but excluding such patients of these classes as are on special diet.

STATEMENT showing Average Weekly Allowance of Food, during the Four Weeks beginning on Sunday, 4th March 1900, to those patients who are embraced in the answer to Query 3—that is, to Pauper Patients, and Private Patients receiving the same diet as pauper patients, but excluding such patients of these classes as are on special diet.

Food.	Is Quantity Limited? "Yes" or "No."	Averge* quantity per week per Patient.	
		Males.	Females.
1. Oatmeal,	Yes.	43·235 oz.	27·136 oz.
2. Milk—			
(*a*) New milk,	,,	3·615p'ts.	6·612p'ts.
(*b*) Skimmed milk (not used).			
(*c*) Buttermilk (not used).			
3. Bread—			
(*a*) Wheaten,	,,	94·602 oz.	84·731 oz.
(*b*) (State kind)—	—	—	—
4. Butter,	Yes.	4·155 ,,	4·286 ,,
5. Margarine (not used).			
6. Tea,	,,	1·036 ,,	1·069 ,,
7. Coffee (not used).			
8. Sugar,	,,	4·593 ,,	4·286 ,,
9. Flour (not in bread),	,,	3·879 ,,	3·879 ,,
10. Beef—			
(*a*) Fresh forequarter,	,,	19·346 ,,	19·346 ,,
†(*b*) Fresh hindquarter,	—	—	—
11. Mutton,	Yes.	4·079 ,,	4·079 ,,
12. Pork,	,,	3·782 ,,	3·782 ,,
13. Ox heads, bones, shanks, &c. (none received as such).			
14. Tinned meat,	,,	2·122 ,,	2·122 ,,
15. Fresh Fish—			
(*a*) Cod,	—	—	—
(*b*) Haddock,	Yes.	16· ,,	12· ,,
(*c*) Herring, fresh,	—	—	—
16. Cured Fish—			
(*a*) Ling, dried,	—	—	—
(*b*) (State kind)—	—	—	—
17. Suet (see also No. 36, Lard),	Yes.	·324 ,,	·324 ,,
18. Potato,	,,	60·072 ,,	60·072 ,,
19. Cabbage,	,,	10·860 ,,	10·860 ,,
20. Carrot,	,,	·800 ,,	·800 ,,
21. Turnip,	,,	11·030 ,,	11·030 ,,

* These averages to be calculated on the numbers stated in answer to Query 3 of Return.
† None of the articles thus marked used during the four weeks to which this statement refers.

Food.	Is Quantity Limited? "Yes" or "No."	Average* quantity per week per Patient.	
		Males.	Females.
22. Peas—			
(*a*) Green,	—	—	—
(*b*) Split,	Yes.	4·098 oz.	4·098 oz.
(*c*) Whole dried,	,,	2·169 ,,	2·169 ,,
23. Beans—			
†(*a*) Green,	—	—	—
(*b*) Dried,	Yes.	1·454 ,,	1·454 ,,
24. Lentils (not used).			
25. †Onions,	—	—	—
26. †Parsley,	—	—	—
27. Vegetables (state kind)—			
Leeks,	Yes.	·775 ,,	·775 ,,
Parsnips,	,,	·254 ,,	·254 ,,
28. Barley,	,,	3·975 ,,	3·975 ,,
29. Rice,	,,	2·618 ,,	2·618 ,,
30. Fruit (state kind)—			
Currants, dried,	,,	·430 ,,	·430 ,,
31. Jam (or jelly),	,,	·872 ,,	·872 ,,
32. Treacle,	—	—	—
33. †Syrup,	—	—	—
34. †Marmalade,	—	—	—
35. Cheese,	Yes.	1·770 ,,	1·770 ,,
36. Other Foods (state kind)—			
Lard (see also No. 17, Suet),	,,	·536 ,,	·536 ,,

* These averages to be calculated on the numbers stated in answer to Query 3 of Return.
† None of the articles thus marked used during the four weeks to which this statement refers.

RETURN showing weight of male working inmates. (Only those who have been resident for at least one year in the asylum, and who are under 70 years of age, are included in this Return.)

ROXBURGH DISTRICT ASYLUM.

NUMBER OF PATIENTS EMPLOYED AT 4TH APRIL 1901.

Nature of Employment.	Male Patients.
Assisting attendants in the wards,	24
As garden or field labourers,	40
,, farm servants,	1
,, clerks, ,, storekeepers,	1
,, messengers,	—
,, stokers,	2
,, bakers,	—
,, tailors,	3
,, shoemakers,	3
,, upholsterers,	2
,, painters,	1
,, joiners,	1
,, plumbers,	—
,, masons,	—
,, slaters,	—
In kitchen,	1
Total,	79

No.	Names of Working Male Patients.	Age.	Nature of Mental Malady.	Length of Residence.	Height in Inches.	Weight in Pounds*
				Yrs. Ms.		
(1) 1308	J. A. - -	69	Secondary dementia.	8 8	63¼	141½
(2) 1569	R. B. - -	34	Chronic mania.	4 4	65½	135
(3) 953	J. B. - -	40	Secondary dementia.	15 8	69¾	164¼
(4) 1092	T. B. - -	44	do.	12 9	66¾	151½
(5) 1795	J. B. - -	39	Chronic mania.	1 2	70	152¼
(6) 1538	J. H. B. -	28	Chronic melancholia.	4 10	68	132
(7) 1674	J. B. - -	46	Chronic mania.	2 11	71¾	212
(8) 1392	A. B. - -	58	Secondary dementia.	7 6	65½	117
(9) 557	G. B. - -	47	Congenital.	21 9	64	137
(10) 906	T. C. - -	50	Chronic melancholia.	16 4	70	170¼
(11) 1647	H. C. - -	36	Congenital.	3 3	65¼	130
(12) 1687	W. D. - -	31	Secondary dementia.	2 10	70	168
(13) 1707	R. D. D. -	22	Chronic melancholia.	2 7	73	178
(14) 1715	R. D. - -	24	Secondary dementia.	2 5	64½	158½
(15) 1578	A. D. - -	44	Chronic mania.	4 3	64¾	191
(16) 1611	A. D. - -	48	Chronic melancholia.	3 11	66¼	139¼
(17) 1706	R. D. - -	43	Secondary dementia.	2 7	65	149¾
(18) 1624	J. D. - -	35	do.	3 9	63½	138
(19) 1469	R. D. - -	52	Congenital.	5 7	69¼	137
(20) 58	A. D. - -	59	Secondary dementia.	33 0	70¾	161½
(21) 255	J. D. - -	52	Acquired epilepsy.	26 8	65¾	150¼
(22) 699	J. D. - -	49	Chronic mania.	19 7	68	122
(23) 1056	P. D. - -	35	Secondary dementia.	13 6	65¼	155
(24) 1797	G. D. - -	64	Chronic mania.	1 2	69	149
(25) 1457	W. E. - -	23	Secondary dementia.	6 2	67	144¼
(26) 625	A. E. - -	48	do.	20 7	64	129
(27) 1735	J. F. - -	39	Chronic mania.	2 1	69¾	181½
(28) 1179	A. F. - -	58	Chronic melancholia.	10 10	69¼	171
(29) 827	J. F. - -	50	Secondary dementia.	17 7	66	121¼
(30) 1435	J. G. - -	45	Congenital.	6 8	68¼	164
(31) 1052	J. S. or G. -	44	Secondary dementia.	13 7	70	150
(32) 1434	W. G. - -	47	Congenital.	6 8	69	166½

* Patients to be weighed before breakfast with their ordinary clothing except coats and boots.

No.	Names of Working Male Patients.	Age.	Name of Mental Malady.	Length of Residence.	Height in Inches.	Weight in Pounds*
				Yrs. Ms.		
(33) 350	R. G. - -	63	Chronic mania.	25 2	64¾	131½
(34) 1242	J. G. - -	26	Congenital.	9 9	69¾	164
(35) 1353	T. G. - -	50	Secondary dementia.	8 –	63½	143½
(36) 1747	R. G. - -	50	Chronic mania.	1 11	66	137¾
(37) 1433	T. G. - -	59	Congenital.	6 8	67½	135
(38) 853	R. G. - -	69	Chronic mania.	17 1	66¾	143½
(39) 605	J. H. - -	43	Secondary dementia.	20 10	71¼	152¼
(40) 1384	J. H. - -	36	do.	7 7	61½	121¾
(41) 1673	J. H. - -	21	Congenital.	2 11	72¾	163
(42) 1280	T. H. - -	45	Secondary dementia.	9 1	66½	149¾
(43) 989	T. H. - -	43	do.	14 10	66½	126
(44) 781	A. H. - -	19	Acute mania.	1 5	70¾	143
(45) 1545	W. H. - -	19	Acquired epilepsy.	4 9	68½	148½
(46) 1477	W. H. - -	47	do.	5 11	65¾	140
(47) 735	J. I. - -	51	Chronic mania.	19 –	69¾	214½
(48) 142	A. K. - -	49	Secondary dementia.	28 9	67¼	130
(49) 736	N. K. - -	43	do.	19 –	67½	152¼
(50) 941	T. L. - -	49	do.	15 10	68	191½
(51) 49	G. L. - -	59	Congenital.	34 –	60½	124
(52) 1445	J. L. - -	38	Chronic mania.	6 6	70	164½
(53) 1638	W. M. - -	19	Congenital.	3 6	64¼	104
(54) 1650	T. M. - -	27	Chronic mania.	3 3	68¼	142
(55) 1364	R. M'M. -	34	do.	7 10	68½	135
(56) 1591	D. D. M. -	34	do.	4 1	65	151¾
(57) 1257	J. M'M. -	35	do.	9 5	68¼	161¼
(58) 1160	J. O. - -	37	Congenital.	11 5	66½	150¾
(59) 997	R. R. - -	35	Chronic mania.	14 8	71¾	148
(60) 1594	J. R. - -	49	do.	4 1	69½	151½
(61) 1684	R. R. - -	69	do.	2 10	65¼	156½
(62) 1710	J. R. - -	51	Secondary dementia.	2 6	69	210
(63) 218	W. A. or R. -	63	Chronic mania.	27 4	69¼	170¼
(64) 780	G. R. - -	40	Congenital.	18 3	61¾	134¼

* Patients to be weighed before breakfast with their ordinary clothing except coats and boots.

No.	Names of Working Male Patients.	Age.	Nature of Mental Malady.	Length of Residence.	Height in Inches.	Weight in Pounds*
				Yrs. Ms.		
(65) 91	J. S. - -	50	Secondary dementia.	30 6	72	150½
(66) 146	W. S. - -	53	do.	28 8	68¼	132½
(67) 1417	J. S. - -	59	Chronic mania.	6 11	66¼	148
(68) 1229	G. S. - -	40	Secondary dementia.	10 –	66¼	114¼
(69) 1801	W. T. S. -	34	Acquired epilepsy.	1 1	69¼	166¼
(70) 1157	J. T. - -	37	Chronic mania.	11 5	67	140½
(71) 1671	A. T. - -	37	do.	3 –	66¼	132
(72) 1482	J. T. - -	28	Secondary dementia.	5 11	67¼	150
(73) 61	J. T. - -	68	do.	32 9	70¼	198½
(74) 502	R. V. - -	61	Chronic mania.	22 5	67¼	132
(75) 1808	J. W. - -	23	Acute melancholia.	1 –	65½	125
(76) 1311	J. W. - -	68	Secondary dementia.	8 8	67½	158
(77) 868	R. W. - -	38	do.	16 10	60	122
(78) 1314	G. W. - -	39	do.	8 8	69	164
(79) 1771	R. W. - -	39	Acquired epilepsy.	1 7	69¼	158

* Patients to be weighed before breakfast with their ordinary clothing exeept coats and boots.

IV. DESCRIPTION AND CRITICISM OF DIETARIES.

(1.) Royal Asylums.

Aberdeen Royal Asylum.

Breakfast.—The majority get porridge and milk along with either tea bread and butter, or oatcake, or milk and bread. Some receive porridge and milk only, and a considerable number, mostly females, receive tea bread and butter only.

Dinner.—There are three different dinners served, two in the asylum, one being for working, the other for non-working patients, the third at the Daviot branch. The weekly routine of dinners for non-working patients includes potato soup on two days, once along with suet pudding, and once with fresh beef; broth on four days, once with potato, twice with green vegetable and potato, and once with beef, potato, and rice; and pea soup with fish and potato on one day. Oatcake is given in addition with all seven dinners. Working patients get dinners similar to the non-working patients, but with an allowance of beef on four additional days, making six days in all. The routine of dinners at Daviot branch includes rice and milk with suet pudding on one day, broth with meat and potato on four days, pea soup with pork or corned beef and potato on one day, and potato soup with fish and potato on one day; bread is given daily. The cooking of the beef is varied.

Evening Meal.—The majority get porridge and milk, either alone or with oatcake and butter. The remainder get tea and bread, with either butter, syrup, or jam.

Extras for Working Patients.—In addition to the difference made at dinner, working patients receive a lunch of oatcake cheese and beer, and tea and bread in the afternoon.

Dietary for Females differs from that for males in that the rations are rather smaller.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	14·0	397·6	74·45	74·12	..	12	340·8	63·78	63·55	..
Heads, bones, &c.,	·5	14·2	1·37	·55	..	·5	14·2	1·37	·55	..
Fish (Fresh),	5·5	156.2	26·86	·46	..	5·5	156·2	26·86	·46	..
Fish (Salt, &c.),	2·63	74·69	15·72	5·27	..	2·01	57·08	12·02	4·01	..
Suet,	·4	11·35	·53	9·29	..	·4	11·36	·53	9·29	.
Butter,	1·7	48·28	·48	41·03	..	3·0	85·2	·85	72·42	..
Eggs,	·64	18·17	2·16	1·68	..	·49	13·91	1·65	1·92	..
Milk,	138·0	3919·2	129·33	156·76	195·96	100	2840·	93·72	113·6	142·0
Cheese,	1·7	48·28	13·37	17·76	1·97	1·4	39·76	11·01	14·63	1·63
Bread,	54·4	1544·96	142·13	20·08	820·37	52·4	1488·16	136·91	19·34	790·21
Oatmeal,	107·3	3047·32	490·61	219·4	2056·94	76·4	2169·76	349·33	156·22	1464·58
Flour,	3·0	85·2	9·71	·85	64·41	3·0	85·2	9·71	·85	64·41
Peas,	2·4	68·16	16·76	·68	42·25	2·0	56·8	13·97	·56	35·71
Barley,	4·5	127·8	10·86	1·4	99·42	4·25	120·7	10·25	1·32	93·9
Rice,	2·5	71·0	5·68	·21	56·09	2·0	56·8	4·54	1·7	44·87
Sugar,	4·5	127·8	..	..	127·8	7·4	210·16	..	..	210·16
Syrup and Treacle,	1·0	28·4	..	..	19·68	2·0	56·8	..	..	39·36
Potatoes,	80·0	2272·0	40·89	2·27	333·98	70·0	1988·0	35·78	1·98	292·23
Fresh Vegetables,	29·0	823·6	11·53	1·64	39·53	28·0	795·2	11·13	1·59	38·16
Currants, Raisins,	·4	11·36	·26	·22	8·26	·4	11·36	·26	·22	8·26
Tea,	·7	19·88	..	..	..	1·3	36·92	..	..	..
Beer,	17·	482·8	2·41	..	48·62	6·	170·4	·85	..	19·6
Total,	..	..	995·11	553·67	3915·28	..	..	784·52	463·58	3245·08

Food Values.—The average daily food values of the male and female dietaries, all routines included, are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	142·2	79·1	559·3	3612
Female	112·1	66·2	463·6	2976

Average height of male working patients is 66½ inches; their average weight at the asylum is 153·3 lbs., at Daviot branch 148 lbs.*

Critical Remarks.—From the detail of the diet shown above it may be gathered that the dietaries of this asylum are all of ample quantity. They all meet the requirements of the standards as stated earlier in the report. The energy value of both the average male dietary and the average female dietary is in excess of the standards, the proteid values are ample, and the amount of carbohydrate is not excessive. The special wants of the working patients appear to be amply provided for. They receive extra food at dinner time, and they get small extra meals in the forenoon and in the afternoon. The application of the weight test (see page 11) shows that the working patients both at the asylum and at Daviot branch are properly fed.

A scrutiny of the use of individual food-stuffs shows three faults in the dietaries—a too small use of meat, an excessive use of oatmeal, and a too small use of condiment. The average use of meat is only 14 oz. for males and 12 oz. for females weekly. When with these figures it is remembered that working patients get three times as much meat as idle patients, it is seen how small the allowance of meat for idle patients is; as a fact it is only 7½ oz. per week for males, and the same for females. This sparse use of meat is to some extent compensated by a free use of milk, but is principally compensated by a very large use of the proteid-rich cereal, oatmeal. The use of oatmeal is larger in this asylum than in any other in Scotland. It is on the table in some form at every meal. Its average quantity consumed provides fully half the nutriment of the entire diet. Many of the patients get porridge and milk night and morning, and oatcake and soup daily for dinner, along with vegetables, suet pudding, or meat, and never get white bread. I am aware that in Aberdeenshire and neighbouring counties the labouring household uses oatmeal to an extent which is not now found in other parts of the country, but even allowing for that, the monotony of an almost exclusively oatmeal diet in an asylum seems hardly right. The use of condiment is too small. The weekly average allowance of tea is less than three-quarters of an ounce per male patient.

The dietary would be greatly improved by giving a tea with bread and butter meal once daily, instead of a porridge meal. This change would vary the diet without unduly reducing its nutritive value. Meat should be used oftener and more freely.

Crichton Royal Institution.

Breakfast.—All males and the majority of females receive porridge and milk only. Some females get tea, bread and margarine, and some both porridge and tea with bread and margarine.

* These averages include only patients who have been resident in the asylum for at least a year. The weights were taken before breakfast with ordinary clothing, boots and coats excepted. This applies to similar averages which are stated along with remarks on the diets of other asylums.

Dinner.—The dinner routine contains bread daily, rice soup twice weekly, once with tart and milk, the other time with meat pie and potato, broth four times a week, twice being followed by beef and pototo, once by suet pudding and milk, and once by fish and potato, and pea soup once a week along with mutton, potato, and milk. Meat is given four times a week; the cooking of it is varied.

Evening Meal.—Tea, bread, and margarine for all.

Extras for Working Patients.—A fuller allowance of oatmeal (about 1 oz. extra) is served at the farm where most of the outside workers live. Female patients working in the laundry, kitchen, and dining halls get tea, bread and margarine both forenoon and afternoon.

Dietary for Females differs from that for males by the allowances being smaller, and in the service of the extras already noted.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	16·3	462·92	86·97	86·12	..	12·36	352·16	66·25	65·46	..
Heads, Bones, &c.,	4·25	120·7	11·7	4·7	..	3·87	110·76	10·74	4·31	..
Mutton,	6·89	195·96	25·47	47·03	..	4·48	127·8	16·61	30·67	..
Fish (Fresh),	11·	312·4	52·94	·92	..	8·14	232·88	39·48	·69	..
Suet,	4·5	127·8	6·0	99·33	..	4·0	113·6	5·33	92·92	..
Margarine,	5·4	153·36	1·84	127·28	..	4·5	127·8	1·53	106·07	..
Milk (Whole),	103·2	2930·88	96·71	117·23	146·54	103·2	2930·88	96·71	117·23	146·54
Milk (Skimmed),	61·8	1755·12	59·67	5·26	89·51	61·8	1755·12	59·67	5·26	89·51
Bread,	90·86	2581·56	237·5	33·56	1370·8	70·67	2007·88	184·72	26·1	1066·18
Oatmeal,	38·5	1093·2	176·0	78·71	737·91	28·45	807·98	130·08	58·17	545·38
Flour,	14·3	406·12	46·29	4·06	307·02	12·65	359·26	40·95	3·59	271·6
Peas,	4·89	139·16	34·23	1·39	86·27	3·82	107·92	26·54	1·07	66·91
Barley,	4·25	120·7	10·25	1·32	93·9	3·67	105·08	8·93	1·15	81·75
Rice,	3·62	102·24	8·17	·3	80·76	2·44	68·16	5·45	·2	53·84
Sugar,	8·61	244·64	..	..	244·64	10·27	292·52	..	..	292·52
Syrup, Jam, &c.,	3·47	97·98	·5	·08	80·63	2·59	73·84	·35	·05	60·23
Potatoes,	81·85	2325·96	41·86	2·32	341·91	60·67	1723·88	31·02	1·72	253·41
Fresh Vegetables,	58·17	1652·88	23·14	3·3	79·33	48·5	1377·4	19·28	2·75	66·11
Currants, Raisins,	1·42	39·76	·92	·92	28·36	1·42	39·76	·92	·92	28·36
Tea,	1·0	28·4	..	..	..	1·32	36·92	..	..	..
Total,	..	..	920·16	613·83	3687·58	..	..	744·56	518·33	3022·34

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	131·4	87·7	526·8	3514
Female . . .	106·4	74·0	431·7	2894

Average height of male working patients is 66·8 inches, average weight 141·6 lbs.

Critical Remarks.—The dietaries of this asylum appear to be good in most respects, they fully meet the energy-value standard, the proteid allowances are ample, carbohydrates are not given to excess, some allowances for the special wants of the working patients appear to be made, the routine is varied, and condiments and fresh vegetables are used in reasonable amount. The average weight of male working patients is below the standard, 141 lbs. as against 145 lbs.; this may be attributed to their not receiving sufficient extra food.

Dundee Royal Asylum.

Breakfast.—Two-thirds of the male and one-third of the female patients receive porridge. The remainder get tea bread and margarine.

Dinner.—The weekly routine includes pea soup with beef and potato once, rice and milk with bread and cheese once, and broth five times, twice being given with beef and potato, once with potato and bread, once with fish and bread, and once with suet pudding and bread. Meat is given four times a week, on three of these occasions it is fresh meat, on one tinned meat. Bread is only given on three days a week.

Evening Meal.—All the females and most of the males receive tea bread and margarine, a few men get porridge and milk.

Extras for Working Patients.—Some working females receive a lunch consisting of bread cheese and beer. At harvest time some male patients get a similar lunch.

Dietary for Females differs from that for males by having smaller rations and by including relatively more bread and less oatmeal.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	18	511·2	93·54	96·61	..	12	340·8	62·36	64·41	..
Mutton,	4	113·6	32·71	25·9	..	3	85·2	24·53	19·42	..
Fish (Fresh),	12	340·8	57·75	1·02	..	12	340·8	57·75	1·02	..
Suet,	·66	18·74	·88	15·32	..	·66	18·74	·88	15·32	..
Margarine,	6·1	173·24	2·07	143·78	..	8·6	244·24	2·93	202·71	..
Milk (Whole),	103	2925·2	96·53	117·00	146·26	55	1562	51·54	62·48	78·1
Cheese,	2	56·8	15·73	20·9	2·33	2	56·8	15·73	20·9	2·33
Bread,	85·1	2416·84	222·34	31·41	1283·34	83·7	2377·08	218·69	30·9	1262·22
Oatmeal,	35·17	998·82	160·71	71·91	674·2	12·7	360·68	58·06	25·96	243·45
Flour,	3·2	90·88	10·36	·9	68·7	3·2	90·88	10·36	·9	68·7
Peas,	5·25	149·1	36·67	1·49	92·44	5·25	149·1	36·67	1·49	92·44
Barley,	7·5	213	18·1	2·34	165·71	7·5	213	18·1	2·34	165·71
Rice,	3	85·2	6·81	·25	67·3	3	85·2	6·81	·25	67·3
Sugar,	7	198·8	..	..	198·8	9·4	266·96	..	..	266·96
Syrup,	·25	7·1	..	..	4·92	·25	7·1	..	..	4·92
Potatoes,	72	2044·8	36·8	2·04	300·58	72	2044·8	36·8	2·04	300·58
Fresh Vegetables,	24	681·6	9·54	1·36	32·71	24	681·6	9·54	1·36	32·71
Currants, Raisins,	50	14·2	·33	·33	10·12	·50	14·2	·33	·33	10·12
Tea,	1	28·4	..	..	..	1·5	42·6	..	..	..
Total,	..	..	800·87	532·56	3047·41	..	..	611·08	451·83	2595·54

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	114·4	76·1	435·7	2969
Female	87·3	64·5	370·8	2478

Average height of working male patients is 65 inches, their average weight 144·1 lbs.

Critical Remarks.—The results got from the returns from this asylum are contradictory. On the one hand the dietaries, both male and female, appear to be insufficient, as they appear to contain too little proteid and to have insufficient energy values, and there appears to be no special allowance made for the wants of working

male patients, but on the other hand the average weight of those patients is such as to show that they are being properly fed. I am unable to explain this contradiction, especially so as I am assured by the Medical Superintendent of the asylum that the regulation dietary is closely adhered to, and that both the dietary schedule and the weight returns were correctly made out.

The details in the schedule show these dietaries, though appearing to be short in quantity, to be of excellent quality, they are varied, they contain a reasonable amount of fresh vegetable and condiments. The allowance of bread and meat are both below the average, a freer use of these two foodstuffs would greatly improve the diets. Some extra food for male working patients appears necessary.

Edinburgh Royal Asylum.

Breakfast.—The majority of both sexes get tea, bread and butter; the remainder of the males get porridge and milk; of the remainder of the females a few receive porridge and milk only, the rest both porridge with milk and tea with bread and butter.

Dinner.—The weekly routine includes broth on six days, on three broth days beef and potato are given, on one potato and dumpling, on one fish and potato, and on one bread and cheese. On the day on which broth is not given the dinner consists of Irish stew and bread. Meat is thus given on four days a week, on one of these tinned meat is used. Bread is only given with two dinners weekly.

Evening Meal.—All the patients get tea bread and butter only. A few men and a considerable number of females receive porridge and milk as a supper.

Extras for Working Patients.—All the more actively worked inmates receive a luncheon of bread and cheese, the male inmates getting half a pint of beer in addition.

It is to be noted in the schedule that special extra food is largely used in this asylum, no less than 20 per cent. of the males and 25 per cent. of the females are excluded from the returns as receiving such extras. It is also to be noted that the routine diet is varied in summer, rice and stewed rhubarb being frequently given in place of broth.

Dietary for Females.—The differences between the dieting of the males and that of the females are that some of the latter get both porridge and bread for breakfast, that more of them have the late supper, that their bread allowance per meal is less, 5 oz. as against $7\frac{1}{2}$ oz., and that they do not get beer.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.				Oz	Grms.			
Beef,	25·5	724·2	142·75	136·60	..	25·5	724·2	142·75	136·60	..
Heads, Bones, &c.,	8·0	227·2	22·03	8·86	..	8·0	227·2	22·03	8·86	..
Fish (Fresh),	6·0	170·4	29·3	·51	..	6·0	170·4	29·3	·51	..
Suet,	·5	14·2	·66	11·61	..	·5	14·2	·66	11·61	..
Butter,	4·0	113·6	1·12	96·56	..	6·0	170·4	1·7	144·84	..
Milk (Whole),	40	1136·0	37·48	45·44	56·8	40	1136·0	37·48	45·44	56·8
Milk (Skimmed),	35	994·0	33·79	2·98	50·69	60	1704·0	57·93	5·11	86·9
Cheese,	6·75	191·7	53·09	70·53	7·86	5·0	142·0	39·33	52·25	5·82
Bread,	118	3351	308·3	43·56	1779·48	109·0	3095·6	284·79	40·24	1643·76
Oatmeal,	21·66	615·14	99·03	44·29	415·21	24·67	700·62	112·79	50·44	472·91
Flour,	3·0	85·2	9·71	·85	64·41	3·0	85·2	9·71	·85	64·41
Peas,	4·5	127·8	31·43	1·27	79·23	4·4	124·96	30·74	1·24	77·47
Barley,	7·5	213·0	18·1	2·34	165·71	7·3	207·32	17·62	2·28	161·29
Rice,	3·0	85·2	6·81	·25	67·3	3·0	85·2	6·81	·25	67·3
Sugar,	5·5	156·2	..	..	156·2	8·0	227·2	..	..	227·2
Potatoes,	108·0	3067·2	55·2	3·06	450·86	104·0	2953·6	53·16	2·94	434 16
Fresh Vegetables,	12·7	360·68	5·04	·72	17·31	12·7	360·68	5·04	·72	17·31
Currants,	·5	14·2	·34	·24	10·53	·5	14·2	34	·24	10·53
Tea, Coffee,	1·9	53·96	..	..	..	2·5	71·0	..	..	..
Beer,	47	1334	6·67	..	150·08	..	..	..	..	..
Total,	..	..	860·85	469·67	3471·67	..	..	852 18	504·42	3325·86

Food Values.—The average daily compositions of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	123	67·1	496	3162
Female	121·7	72·1	475·1	3117

Average height of male working patients is 65·6 inches, average weight 143 lbs.

Critical Remarks.—A comparison of the food values of the diets of this asylum with the male and female standards shows that the male diet is somewhat below the standard and the female in considerable excess of the standard. When in any institution, as is here to be seen, the male and the female diets are of nearly equal value it may be assumed that both are not correct; in this instance

the chief fault is excessive feeding of females, their diet being nearly 18 per cent. too much, the male diet being only about 4 per cent. too small. Notwithstanding the shortage of the male diet the male workers are found to average more than standard weight, a contradiction which is due to their receiving an ample luncheon. In other respects these diets are very good, they are varied and condiment is sufficiently used. One necessary improvement that becomes evident by a critical examination of them is an increase of the food allowance of the male patients; this could readily be brought about by giving bread with all dinners instead of only twice weekly as at present. The allowance of fresh fish for the weekly fish dinner is too small, and might with advantage be doubled.

Montrose Royal Asylum.

Breakfast.—The majority get porridge and milk only. The remainder, about 25 per cent. of the males and 40 per cent. of the females, get tea bread and butter in addition.

Dinner.—The weekly routine includes broth on four days, once with Irish stew, once with fish and potato, and twice with beef and potato, lentil soup with tinned beef on one day, potato soup with fruit dumpling on one day, and pea soup with mealy pudding on one day. Fresh meat is given on three days a week, tinned beef on one. Bread is given daily with dinner.

Evening Meal.—For all inmates this consists of tea bread and butter. Syrup and jam are given once weekly.

Extras for Working Patients.—Tea with bread and butter is given to a few who do early work in the morning. Female patients working in the laundry on Monday and at "spring cleaning" get bread and beer in the forenoon and tea with bread and butter or jam in the afternoon.

Dietary for Females differs from that for males by having smaller portions, notably of bread and soup.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.				Oz.	Grms.			
Beef,	20	568	115·28	105·75	..	19	539·6	107·81	100·44	..
Pork,	4	113·6	13·63	33·85	..	4	113·6	13·63	33·85	..
Fish (Fresh),	7	198·8	33·62	·59	..	7	198·8	33·62	·59	..
Suet,	·25	7·1	·33	5·8	..	·25	7·1	·33	5·8	..
Butter,	7	198·8	1·96	168·96	..	7	198·8	1·96	168·96	..
Milk (Whole),	90	2556	84·34	102·24	127·8	90	2556	84·34	102·24	127·8
Cheese,	2	56·8	15·73	20	2·33	2	56·8	15·73	20·9	2·33
Bread,	106	3010·4	276·95	39·13	1598·52	83	2357·2	216·86	30·64	1251·67
Oatmeal,	23·6	670·24	107·9	48·25	452·41	23·6	670·24	107·9	48·25	452·41
Flour,	3	85·2	9·71	·85	64·41	3	85·2	9·71	·85	64·41
Peas, Lentils,	9	255·6	64·27	2·54	154·88	8	227·2	57·13	2·26	138·68
Barley,	4·57	134·9	11·46	1·48	104·95	4·25	120·7	10·25	1·32	93·9
Rice,	1·1	31·24	2·49	·09	24·67	1·1	31·24	2·49	·09	24·67
Sugar,	10·5	298·2	.	..	298·2	10·5	298·2	..	..	298·2
Treacle, Marmalade, &c.,	3·5	99·4	·34	·05	77·51	3·5	99·4	·34	·05	77·51
Potatoes,	80	2272	40·89	2·27	333·98	80	2272	40·89	2·27	333·98
Fresh Vegetables,	24·1	684·44	9·58	1·36	32·85	24·1	684·44	9·58	1·36	32·85
Currants, Raisins,	1·25	35·5	·84	·78	25·52	1·25	35·5	·84	·78	25·52
Tea,	1·75	49·7	..	..	..	1·75	49·7	..	..	..
Total,	..	..	789·32	534·89	3298·03	..	..	713·41	520·65	2923·93

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	112·8	76·4	471·1	3105
Female	101·9	74·4	417·7	2822

Average height of male working patients is 66·4 inches, average weight 147·5 lbs.

Critical Remarks.—The dietaries of this asylum are in most respects excellent. The food is varied, fresh vegetable and condiments are sufficiently used, but the male diet falls short of the standard, both as regards energy value and the proteid value. This shortage may be ascribed to male breakfasts being

insufficient. The schedule states that the majority of male patients receive porridge and milk only, and that their allowance of oatmeal is only three ounces per head. The doubling of that allowance would make the porridge breakfast a reasonable quantity, and would correct this imperfection of the diet. The female dietary appears to be ample. A luncheon for male workers is desirable.

(2.) District Asylums.

Argyll District Asylum.

Breakfast.—The majority have porridge and milk only, while a few of both sexes get tea bread and butter only.

Dinner.—The weekly routine contains one dinner of rice and milk and bread and cheese, one of broth beef and potato, one of pea soup beef and potato, two dinners of broth fish and potato, one of broth suet pudding and bread, and one of Irish stew. Fresh meat is given on two days, tinned meat on one day, fish on two. Bread is given on two days only.

Evening Meal.—This for all consists of tea bread and butter, and marmalade one night weekly.

Extras for Working Patients.—Patients doing a fair day's work get milk and bread for lunch. Some women workers get tea and bread in the early morning and again in the course of the afternoon. Some male patients and a few female patients get an allowance of porridge as a supper.

Dietary for Females differs from that for males by having smaller rations of many foods, especially bread, oatmeal, soup, and fish. The freer use of extras to some females has been noted.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	18·13	514·88	102·53	93·26	..	14·51	412·07	83·15	74·16	..
Heads, Hough, &c., .	6·14	174·37	16·91	6·8	..	6·14	174·37	16·91	6·8	..
Fish (Fresh), . . .	11	312·4	52·87	·93	..	8	227·2	38·50	·68	..
Fish (Salt), . . .	7·8	225·52	46·23	19·84	..	7·8	225·52	46·23	19·84	..
Suet, ...	1·5	42·6	2·0	34·84	..	1·5	42·6	2·0	34·84	..
Butter, ...	4·49	127·51	1·27	108·38	..	4·49	127·51	1·27	108 38	..
Eggs, ...	2·96	84·06	10·0	7·81	..	2·96	84·06	10·0	7·81	..
Milk (Whole), . . .	125·40	3561·36	117·52	142·45	178·06	125·40	3561·36	117·52	142·45	178·06
Milk (Condensed), . .	·53	15·05	1·32	1·24	8·14	·53	15·05	1·32	1·24	8·14
Bread, ...	102·91	2922·64	268·88	37·99	1551·92	81·88	2325·39	213 93	30·23	1234·78
Oatmeal, ...	33·18	942·31	151·71	67·84	636·05	26·54	753·73	121·35	54·26	508·76
Flour, ...	4·46	126·66	14·43	1·26	95·75	4·46	126·66	14·43	1·26	95·75
Peas, ...	3·04	86·33	21·23	·86	53·52	3·04	86·33	21·23	·86	53·52
Barley, ...	5·08	144·27	12·26	1·58	112·24	5·08	144·27	12·26	1·58	112·24
Rice, ...	2·49	70·71	5·65	·21	55·86	2·49	70·71	5·65	·21	55·86
Sugar, ...	9·5	156·2	..	..	156·2	9·5	156·2	..	..	156·2
Jam, Treacle, &c., . .	4·28	121·54	·4	·06	94·41	4·28	121·54	·4	·06	94·41
Potatoes, . . .	96	2726·4	49·04	2·72	400·76	96	2726·4	49·04	2·72	400·76
Fresh Vegetables, . .	31	880·4	12·32	1·76	42·25	31	880·4	12·32	1·76	42·25
Currants, . . .	·71	19·88	·47	·33	14·75	·71	19·88	·47	·33	14·75
Tea, ...	1·57	44·58	..	..	..	1·57	44·58	..	..	..
Total, . .	..	..	887·04	530·16	3400·01	..	..	767·98	489·47	2955·58

Food Values.—The average daily composition of the male and female dietaries is as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	126·7	75·7	485·7	3215
Female . . .	109·7	69·9	422·2	2831

Average height of male working patients is 65·6 inches, average weight 147·3.

Critical Remarks.—The energy value of the average male dietary nearly coincides with the standard. That of the female dietary is some excess of the standard. The proteid values of both are in excess of the standards. The quality of the diet appears to be excellent, the use of fresh vegetable and of condiments is ample, and variety is sufficient. The special wants of the working

patients are allowed for. The average weight of the male working patients is satisfactory.

Ayr District Asylum.

Breakfast.—About half of the male and nearly all the female patients get both porridge and milk, and tea with bread and butter. Of the other half of the male patients the most get porridge and milk only. A few male and female patients get tea with bread and butter only.

Dinner.—The weekly routine includes one dinner of rice and milk and bread and cheese, one of pea soup, meat stewed with vegetable and potato, one of broth, bread, and pudding, one of broth, fish, and potato, one of lentil soup, meat stewed with vegetable, and potato or Irish stew, and two of rice soup with beef and potato. Fresh meat is given on three days, and tinned meat on one day. Bread is given on two days only.

Evening Meal.—This consists of tea with bread and butter for all.

Extras for Working Patients.—A few male patients get milk, bread, and butter in the afternoon. Females in the laundry get milk or beef tea or custard and bread in the forenoon, and those in the kitchen and laundry get tea, bread and marmalade in the afternoon.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	18·0	511·2	110·56	04·22	..	18 0	511·2	110·56	94·22	..
Heads, Bones, &c.,	8·0	227·2	22·03	8·86	..	8·0	227·2	22·03	8·86	..
Fish (Fresh),	8·0	227·2	37·94	·68	..	8·0	227·2	37·04	·68	..
Suet,	·75	21·3	1·0	17·42	..	·75	21·3	1·0	17·42	..
Butter,	5·5	156·2	1·56	132·77	..	5·5	156 2	1·56	132·77	..
Milk (Whole),	100	2840·0	93·72	113·6	142·0	100	2840·0	93·72	113·6	142·0
Cheese,	2·0	56·8	15·73	20·9	2·33	2·0	56·8	15·73	20·0	2·33
Bread,	106·0	3010·4	276·95	39·13	1598·52	80·0	2272·0	209·02	29·53	1206·53
Oatmeal,	35·0	994·0	160·03	71·56	670·95	17·5	497·0	80·02	35·78	335·47
Flour,	4·0	113·6	12·05	1·13	85·88	4·0	113·6	12·95	1·13	85·88
Peas, Lentils,	11·0	312·4	78·25	3·11	100·10	11·0	312·4	78·25	3·11	100·10
Barley,	3·0	85·2	7·24	·93	66·28	3·0	85·2	7·24	·93	66·28
Rice,	7·0	108·8	15·9	·59	157·05	7·0	198·8	15·0	·59	157·05
Sugar,	4·5	127·8	..	..	127·8	4·75	134·0	..	..	134·9
Syrup, Marmalade,	3·25	92·3	·5	·08	76·90	3·25	02·3	·5	·08	76·90
Potatoes,	80·0	2272·0	40·89	2·27	333·98	80·0	2272·0	40·89	2·27	333·98
Fresh Vegetables,	23·25	660·3	0·24	1·32	31·69	23·25	660·3	9·24	1·32	31·69
Tea,	1·0	28·4	..	..	..	1·5	42·6	..	..	..
Total,	..	..	884·49	508·57	3483·48	..	..	736·55	463·19	2763·11

Food Values.—The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	126·4	72·6	467·6	3234
Female . . .	105·2	66·2	394·7	2665

Average height of male working patients is 66·5 inches, average weight 152·3 lbs.

Critical Remarks.—These are in all ways excellent diets. The food values of both closely agree with the standard, variety is sufficient, the use of fresh vegetable and condiment is ample, and the special wants of working patients are provided for. The average weight of working patients is satisfactory.

Banff District Asylum.

Breakfast.—Nearly all the male inmates have porridge and milk and bread, about one-third of them get tea in addition. Most of the females get porridge and milk and tea with bread and butter, while some get porridge and milk and bread only. A few of both sexes receive tea bread and butter only.

Dinner.—The weekly routine contains one dinner of rice milk and cheese, three of broth, meat and potato, one of pea soup and pudding, one of Irish stew, and one of beef, green vegetable and oatmeal brose. Bread is given with every dinner. Meat is given on four days a week. The composition of the broth is varied.

Evening Meal.—The majority of male patients receive porridge and milk and tea with bread and butter, a few get tea with bread and butter only. Of the female patients the majority get tea bread and butter only, a few get porridge in addition.

Extras for Working Patients.—A few of both sexes receive brose and bread with either milk or tea as an early breakfast. All more actively worked patients get bread with either syrup or jam and either coffee or milk in the forenoon, and tea with bread and either butter or jam in the afternoon, Laundry and kitchen workers have as an addition twice weekly either fresh fish or an egg in the forenoon. Some kitchen workers have some milk and bread as a supper.

Dietary for females differs from that of the males in having smaller rations of bread, oatmeal, potato, and beef.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	20·0	568·0	106·20	105·98	..	16·0	454·4	84·85	84·85	..
Heads, Bones, &c.,	4·0	113·6	11·02	4·43	..	4·0	113·6	11·02	4·43	..
Fish (Fresh),	..	..	..	..	..	2·0	56·8	9·77	·17	..
Suet,	1·0	28·4	1·32	23·22	..	1·0	28·4	1·32	23·22	..
Butter,	4·0	113·6	1·12	96·56	..	4·0	113·6	1·12	96·56	..
Eggs,	..	..	..	..	..	·66	18·74	2·23	1·73	..
Milk (Whole),	120	3402·0	112·26	136·08	170·1	80	2272·0	74·97	90·88	113·6
Cheese,	3·0	85·2	23·6	31·35	3·49	2·0	56·8	15·73	20·9	2·33
Bread,	140·0	3976·0	365·79	51·68	2111·25	100·0	2840·0	261·28	36·92	1508·04
Oatmeal,	66·0	1874·4	301·77	134·95	1265·22	40·0	1136·0	182·88	81·78	766·8
Flour,	2·5	71·0	8·09	·71	53·68	2·0	56·8	6·47	·56	42·94
Peas,	7·0	198·8	48·9	1·98	123·25	7·0	198·8	48·9	1·98	123·25
Barley,	3·0	85·2	7·24	·93	66·28	3·0	85·2	7·24	·93	66·28
Rice,	3·0	85·2	6·81	·25	67·3	3·0	85·2	6·81	·25	7·3
Sugar,	4·5	127·8	..	..	127·8	6·0	170·4	..	..	170·4
Syrup, Jam,	1·5	42·6	·17	·03	33·83	3·0	85·2	·34	·05	67·67
Potatoes,	62·0	1760·8	31·69	1·76	258·83	52·0	1476·8	26·58	1·47	217·08
Fresh Vegetables,	26·25	745·5	10·43	1·49	35·78	22·25	631·9	8·84	1·26	30·33
Currants, Raisins,	1·0	28·4	·67	·66	20·25	1·0	28·4	·67	·66	20·25
Tea, Coffee,	·9	25·56	..	..	..	2·1	59·64	..	..	..
Total,	..	..	1037·08	592·06	4337·06	..	..	751·02	448·6	3196·27

Food Values.—The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	148·5	84·6	619·6	3934
Female	107·3	64·1	456·6	2907

Average height of male working patients is 67·2 inches, average weight 151·9 lbs.

Critical Remarks.—The energy and proteid values of both male and female dietaries not only satisfy the standard, but are in excess. Carbohydrate is somewhat excessive in the male diet. Ample allowance is made for the special wants of working patients. Fresh vegetables are sufficently used. By the free use of oatmeal the diets are adapted to the custom of the part of Scotland in which the asylum is situated, but the use of oatmeal is not carried to excess. The average weight of the male working

patients is satisfactory. The allowance of tea, specially at breakfast, might with advantage be increased.

Elgin District Asylum.

Breakfast.—One-third of the male patients receive porridge and milk only, the remainder of the male patients and all the female patients get tea with bread and butter either alone or along with porridge. The rations of oatmeal, milk, and bread vary according to whether the patients get porridge and bread, or porridge only.

Dinner.—The weekly routine contains one dinner of broth and cheese, three of broth and pudding, one of broth, beef and potato, one of rice soup and Irish stew, and one of pea soup, fish and potato. Bread is given with all dinners. A small quantity of meat is given daily in the soup, separate meat rations are given on two days only. The puddings are varied.

Evening Meal.—This consists of tea with bread and butter for all, and porridge and milk in addition for many.

Extras for Working Patients.—Some working females get tea with bread and marmalade in the early morning. All working women receive milk with bread and marmalade in the forenoon, and tea with bread and marmalade or jam in the afternoon. Male working patients get in the forenoon an extra consisting of bread and marmalade.

Dietary for females differs from that for males by having smaller rations of bread, meat, and potatoes, by all receiving tea for breakfast, and by the freer use of extras.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	26·5	752·6	137·72	142·24	..	24·5	695·8	127·33	131·5	..
Fish (Fresh),	12·0	340·8	58·6	1·02	..	8	227·2	39·06	·68	..
Suet,	3·0	85·2	4·0	69·69	..	3	85·2	4·0	69·69	..
Butter,	6·75	191·7	1·91	162·94	..	7·5	213	2·13	181·05	..
Milk (Whole),	145	4118·0	135·89	164·72	205·9	122	3464·8	114·33	138·59	173·21
Cheese,	3	85·2	23·6	31·35	3·49	3	85·2	23·6	31·35	3·49
Bread,	106	3010·4	276·95	39·13	1598·52	111	3152·4	290·02	40·98	1703·92
Oatmeal,	31·5	894·6	144·03	64·41	603·85	18·5	525·4	84·58	37·82	354·64
Flour,	10·5	298·2	33·99	2·98	225·43	8·5	241·4	27·51	2·41	182·49
Peas,	4	113·6	27·94	1·13	71·43	4	113·6	27·94	1·13	71·43
Barley,	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice,	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar,	9·5	269·8	..	..	269·8	11·5	326·6	..	..	326·6
Syrup, Marmalade,	8·5	241·4	1·1	·18	195·34	7·5	213	·93	·15	171·34
Potatoes,	42	1192·8	21·47	1·99	175·34	36	1022·4	18·4	1·02	150·29
Fresh Vegetables,	31·75	901·7	12·62	1·8	43·28	31·75	901·7	12·62	1·8	43·28
Tea,	1·5	42·6	..	..	..	2·2	62·48	..	..	..
Total,	..	..	903·38	688·85	3614·69	..	..	796·01	643·44	3403·03

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	120·0	98·5	516·4	3561
Female . .	113·7	91·9	486·1	3314

Average height of male working patients is 66·8 inches, average weight 143·8 lbs.

Critical Remarks.—The diets of this asylum appear to be good. Their only fault, and that is not a bad one, is that they are rather excessive; the female diet is especially so. They are varied, the wants of working patients are allowed for, and the use of condiments is sufficient. The average weight of the male working patients is satisfactory.

Fife and Kinross District Asylum.

Breakfast.—The majority of patients both male and female get both porridge and milk and tea with bread and butter, some of both sexes get porridge and milk only, and some tea with bread and butter only.

Dinner.—The weekly routine includes a dinner of rice and milk tinned beef and bread and cheese, two of broth, beef and potato, two of broth, bread and suet pudding, one of broth, fish and potato, and one of stewed meat with vegetable and potato. Meat is given four times a week, twice being fresh meat and twice tinned meat. Bread is given with three dinners.

Evening Meal.—The female patients get tea with bread and butter or marmalade every evening. On four evenings in the week the male patients have tea and bread and butter or marmalade. On three evenings they have porridge and milk, or tea and bread and butter.

Extras for Working Patients.—A few get an early breakfast. A luncheon of bread and cheese is given to all working patients. Female patients working in laundry get tea. A supper consisting of coffee and bread is given to some male patients who do extra work.

Dietary for females differs from that for males in that the rations of bread, meal, and potatoes are smaller.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	24·8	704·32	144·33	132·72	..	20·6	585·04	119·77	110·25	..
Heads, Bones, &c.,	5·7	161·88	15·7	6·31	..	5·7	161·88	15·7	6·31	..
Pork,	2·7	76·68	9·0	22·85	..	2·5	71	8·52	21·15	..
Fish (Fresh),	4·3	122·12	20·39	·36	..	4·3	122·12	20·39	·36	..
Stock Fish,	4·2	119·28	32·56	3·57	..	4·2	119·28	32·56	3·57	..
Suet,	1·5	42·6	2·0	34·84	..	1·5	42·6	2·0	34·84	..
Butter,	2·8	79·52	·79	67·59	..	3·7	105·08	1·05	89·31	..
Milk (Whole),	120	3402	112·26	136·08	170·1	84	2385·6	78·72	95·42	119·28
Cheese,	4·9	139·16	38·54	51·21	5·7	4·9	139·16	38·54	51·21	5·7
Bread (White, Brown),	123	3493·2	300·86	48·10	1822·51	113	3209·2	277·97	43·98	1676·81
Oatmeal,	38	1079·2	173·75	77·7	728·46	25	710	114·31	51·12	479·25
Flour,	9·2	261·28	29·78	2·61	197·52	6·9	195·96	22·33	1·95	148·14
Lentils,	3·3	93·72	24·07	·93	55·48	3·3	93·72	24·07	·93	55·48
Barley,	4	113·6	9·65	1·24	88·38	4	113·6	9·65	1·24	88·38
Rice,	3·1	88·04	7·04	·26	69·55	3·1	88·04	7·04	·26	69·55
Sugar,	6	170·4	..	..	170·4	7·7	218·68	..	..	218·68
Syrup, Jam, &c.,	4·3	122·12	·69	·11	102·32	4·3	122·12	·69	·11	102·32
Potatoes,	101	2868·4	51·63	2·86	421·65	67	1902·8	34·24	1·9	279·71
Fresh Vegetables,	31·1	883·24	12·36	1·76	42·39	31·1	883·24	12·36	1·76	42·39
Currants, Raisins,	2·4	68·16	1·59	1·59	48·62	2·4	68·16	1·59	1·59	48·62
Tea,	1	28·4	..	..	..	1·3	36·92	..	..	..
Total,	..	..	986·99	592·69	3923·08	..	..	821·5	517·26	3334·31

Food Values.—The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	141·0	84·7	560·4	3663
Female	117·3	73·9	476·3	3121

Average height of male working patients is 65·6 inches, average weight 143·7 lbs.

Critical Remarks.—Both the male and female dietaries appear to be of ample quantity, they both more than meet the standards. The female dietary is in considerable excess of the standard. The special wants of working patients are amply provided for. Fresh vegetables and potatoes are freely used, and the food is varied.

The allowances of meat are ample, but the dietary would be improved by giving fresh meat oftener and tinned meat more seldom. The average weight of the male working patients is satisfactory.

Glasgow (Gartloch) Asylum.

Breakfast.—On week days all get porridge and milk and tea with bread and margarine. On Sundays an extra allowance of bread and some marmalade is given in lieu of porridge.

Dinner.—The weekly routine of dinners in this asylum is subject to frequent change. From the routines submitted it is seen that soup is given five or six times a week, rice and milk once a week, fish once or twice a week, pudding or stewed fruit once or twice a week, potato about six times a week, bread only once or twice a week, and cheese occasionally. On several occasions during the month the dinner served in the hospital dining hall was different from that served in the general dining hall.

Evening Meal.—All get tea bread and margarine daily, with jam as an addition once weekly.

Extras for Working Patients.—Females working in the kitchen and laundry get tea with bread or jelly in the forenoon and in the afternoon. Extra food is not as a rule given to male workers.

Dietary for females differs from that for males by having smaller rations of bread, meat, and fish.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	28·4	806·56	155·27	130·93	..	23·6	670·24	131·24	109·82	..
Heads, Hough, &c.,	8	227·2	22·03	8·86	..	8	227·2	22·03	8·86	..
Mutton Sides,	4	113·6	14·76	27·26	..	3	85·2	11·07	20·44	..
Pork,	4	113·6	13·63	33·85	..	3	85·2	10·22	25·38	..
Fish (Fresh),	11	312·4	52·55	·93	..	9	255·6	43·0	·76	..
Stock Fish,	1·5	42·6	11·62	·12	..	1·25	35·5	9·69	·1	..
Suet,	·5	14·2	·66	11·61	..	·5	14·2	·66	11·61	..
Margarine,	5·9	167·56	2·01	139·07	..	5·9	167·56	2·01	139·07	..
Milk (Whole),	95	2698	89·03	107·92	134·9	95	2698	89·03	107·92	134·9
Cheese,	1	28·4	7·86	10·45	1·16	1	28·4	7·86	10·45	1·16
Bread,	112	3180·8	292·63	41·35	1689·0	82	2328·8	214·24	30·27	1236·59
Oatmeal,	19	539·6	86·87	38·85	364·23	19	539·6	86·87	38·85	364·23
Flour,	4	113·6	12·95	1·13	85·88	3·25	92·3	10·52	·92	69·77
Peas, Lentils,	5	142	35·54	1·41	86·44	5	142	35·54	1·41	86·44
Barley,	3	85·2	7·24	·93	66·28	3	85·2	7·24	·93	66·28
Rice,	4·9	139·16	11·13	·41	109·93	4·9	139·16	11·13	·41	109·93
Sago,	·5	14·2	1·27	·05	11·09	·5	14·2	1·27	·05	11·09
Sugar,	7·6	215·84	..	..	215·84	7·6	215·84	..	..	215·84
Syrup, Jam, &c.,	3	85·2	·34	·05	67·67	3	85·2	·34	·05	67·67
Potatoes,	90	2556	46·0	2·55	375·73	90	2556	46·0	2·55	375·73
Fresh Vegetables,	34	965·6	13·51	1·93	46·34	34	965·6	13·51	1·93	46·34
Currants, Raisins,	2·2	62·48	1·45	1·68	43·60	2·2	62·48	1·45	1·68	43·60
Tea, Coffee,	1·5	42·6	..	..	..	1·56	44·37	..	..	..
Ginger,	·06	1·77	..	..	..	..	..	..	..	..
Total,	..	..	878·35	561·34	3298·09	..	..	754·92	513·46	2829·57

Food Values.—The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	125·5	80·2	471·1	3192
Female	107·8	73·3	404·2	2781

Average height of male working patients is 65·5 inches, their average weight is 134·8 lbs. Male patients working outside have an average height of 65·7 inches and an average weight of 135·1 lbs.

Critical Remarks.—A very commendable feature of the dietary of this asylum is variety. This is specially noticeable in the dinner routine. The male diet is in some ways faulty. The average food value is too small, and it does not allow for the special wants of the working patients. These assertions are based on a comparison of the food value to the standard, and by the result of the weight test, which shows the average weight of working patients to be decidedly too small, 134·8 lbs. as against 140 lbs. These assertions are further supported by notes I made when visiting the asylum and inspecting the service of a dinner; I reproduce them:—"Dinner consisted of potato soup, ginger pudding, and bread. Quantities limited, a portion to each table, which was equally divided. Absolutely no food left over." The female dietary appears to be sufficient and good in all respects. The male dietary of this asylum would be much improved if some food such as bread or oatcake were given *ad libitum* with all dinners, and were the working patients given some luncheon during the forenoon. The dietary is amply sufficient for idle inmates, but not for those doing a moderate day's work.

Glasgow (Woodilee) Asylum.

Breakfast.—Nearly two-thirds of the male patients get porridge and milk and bread, the remainder get porridge and milk and tea with bread and margarine. Of the female patients about two-thirds get tea bread and margarine only, the remainder getting porridge and milk in addition.

Dinner.—The routine of dinners is varied and is not the same on any two weeks of a month. Soup is given five or six times a week, rice and milk is usually given once, meat is given three or four times a week, fish once or twice a week, pudding about twice a week, potato four times a week, bread to male patients only when potato is not given, to female patients it is given daily, coffee is given once weekly, and cheese occasionally. A great variety of dishes appear in these routines; especially is this so with regard to puddings, for no fewer than nine different puddings are mentioned in the schedule.

Evening Meal.—This consists of tea bread and butter for all, jam and marmalade being occasionally given.

Extras for Working Patients.—A few men and a considerable number of women get an early breakfast, consisting of tea, bread and margarine. No lunch is given to either sex. Afternoon tea is given to females working in the laundry and kitchen.

Dietary for females differs from that for males by having the different breakfast already noted, by having a small daily ration of bread at dinner, by having smaller rations of meat, fish, and dinner bread on days when no potato is given, and by a more liberal use of margarine.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	25·5	724·2	144·44	135·58	..	18·25	518·3	106·19	96·69	..
Heads, Hough, &c.,	1	28·4	2·74	1·1	..	1	28·4	2·74	1·1	..
Mutton Sides,	1	28·4	3·69	6·81	..	1	28·4	3·69	6·81	..
Pork,	1	28·4	3·4	8·46	..	·5	14·2	1·7	4·23	..
Fish (Fresh),	8	227·2	38·50	·68	..	6	170·4	28·87	·50	..
Stock Fish,	3	85·2	23·25	·25	..	3	85·2	23·25	·25	..
Suet,	2·5	71	3·33	58·07	..	2·5	71·0	3·33	58·07	..
Margarine,	4·4	124·96	2·49	103·71	..	5	142	1·7	117·86	..
Milk (Whole),	96	2726·4	89·97	109·05	136·32	60	1704	56·23	68·16	85·2
Cheese,	1	28·4	7·86	10·45	1·16	·75	21·3	5·9	7·84	·87
Bread,	98	2754·8	253·44	35·81	1462·79	91	2584·4	237·76	33·59	1372·31
Oatmeal,	24	681·6	109·73	49·07	460·08	5·2	147·68	23·77	10·63	99·68
Flour,	3	5·2	9·71	·85	64·41	3	85·2	9·71	·85	64·41
Peas, Lentils, &c.,	2·75	78·1	19·13	·88	47·47	2·75	78·1	19·13	·88	47·47
Barley,	3·75	106·5	9·05	1·17	82·85	3·75	106·5	9·05	1·17	82·85
Rice,	3·25	92·6	7·38	2·76	72·91	3·25	92·6	7·38	2·76	72·91
Tapioca,	·5	14·2	·05	·01	12·49	·5	14·2	·05	·01	12·49
Sugar,	6·5	184·6	..	..	184·6	9·5	269·8	..	.	269·8
Treacle, Marmalade, &c.,	2·25	63·9	·25	·04	50·75	2·25	63·9	·25	·04	50·75
Potatoes,	85	2414	43·45	2·41	354·85	85	2414	43·45	2·41	354·85
Fresh Vegetables,	29	823·6	11·53	1·64	39·53	29	823·6	11·53	1·64	39·53
Currants,	·5	14·2	·34	·24	10·53	·5	14·2	·34	·24	10·53
Tea, Coffee,	1·25	35·5	..	..	..	2	56·7	..	..	..
Total,	..	..	783·73	529·04	2980·74	..	.	595·92	415·73	2563·65

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	112·0	75·6	425·8	2908
Female	85·1	59·4	366·2	2403

The average height of male working patients is 65 inches, their average weight 138·1 lbs. The average height and weight of those male working patients who reside at the farm is 65½ inches and 131 lbs.

Critical Remarks.—The dietaries of this asylum, like those of Gartloch Asylum, are commendable on account of their quality, but are wanting in quantity. Variation of diet is very amply provided, no other asylum gives its pauper inmates so large a number of different dishes. As to quantity these dietaries are both wanting, for neither the male nor female satisfies the standards for idle inmates, far less the standards for working inmates. The energy values of both are too small, and so are the proteid values. Combined with this shortage it is to be noted that practically no allowance is made for the extra food requirement of the working patients, and it consequently is not surprising to find that their average weight is below the standard. The inmates of the farm have an average height of 65·5 inches, their average weight is 131 lbs., which is 9 lbs. less than the standard. A service of bread *ad libitum* with all dinners, and a small luncheon to working patients, would correct the faults of these in many ways excellent diets.

Govan District Asylum.

Breakfast.—All patients get porridge with milk and tea with bread and margarine.

Dinner.—The weekly routine contains two dinners of rice and milk and pudding, one of broth mutton and potato, one of pea soup, meat stewed with vegetable and potato, one of pea soup, beef and potato, one of rice soup and meat pie, and either a dinner of broth, beef and potato, or one of fish, potato and pudding. Bread is given daily. Meat is given four or five times a week. The puddings are varied.

Evening Meal.—All patients receive tea and bread with either margarine, jam, or marmalade.

Extras for Working Patients.—Females working in the laundry, kitchen and official blocks get tea, bread and margarine in the forenoon and again in the afternoon, jelly is sometimes given instead of margarine, and soup instead of tea.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, rice and milk pudding, meat, and potatoes.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	25	710	132·41	132·69	..	18·25	518·3	96·75	96·80	..
Heads, Hough, &c., .	8	227·2	22·03	8·86	..	8	227·2	22·03	8·86	..
Mutton Sides, . ,	6·25	177·5	23·07	42·6	..	5·75	163·3	21·22	39·19	..
Stock Fish, . . .	4·25	120·7	32·95	½·36	..	4·25	120·7	32·95	·36	..
Suet, ...	7	198·8	9·34	162·61	..	7	198·8	9·34	162·61	..
Lard, ...	·9	25·56	..	25·56	..	·9	25·56	..	25·56	..
Margarine, . . .	4·6	130·64	1·56	108·43	..	4·6	130·64	1·56	108·43	..
Eggs, ...	·75	21·3	2·53	1·98	..	·75	21·3	2·53	1·98	..
Milk (Whole), . . .	150	4260	140·58	170·4	233·0	150	4260	140·58	170·4	233·0
Bread, Buns, . . .	89	2527·6	227·17	42·44	1349·90	86·75	2463·7	221·19	41·61	1305·97
Oatmeal, ...	20	568	91·44	40·89	383·4	20·25	575·1	92·59	41·4	388·19
Flour, ...	7·25	205·9	23·47	2·05	155·66	6·75	191·7	21·85	1·91	144·92
Peas, ...	6	170·4	41·91	1·7	105·64	6	170·4	41·91	1·7	105·64
Barley, ...	1·6	45·44	3·86	·49	35·35	1·6	45·44	3·86	·49	35·35
Rice, ...	7·5	213	17·04	·63	168·27	5·5	156·2	12·49	·46	123·39
Tapioca, ...	·6	17·04	·06	·02	14·99	·6	17·04	·06	·02	14·99
Sugar, ...	15	426	..	.	426·0	16·25	461·5	..	..	461·5
Treacle, Jam, &c., .	4·25	120·70	·61	·09	99·38	4·25	120·70	·61	·09	99·38
Potatoes, . . .	82	2328·8	41·91	2·32	342·33	43·5	1235·4	22·23	1·23	181·6
Fresh Vegetables, . .	40·6	1153·04	16·14	23·06	55·34	40·6	1153·04	16·14	23·06	55·34
Currants, Raisins, . .	·8	22·72	·53	·53	16·20	·8	22·72	·53	·53	16·20
Tea, Coffee, . . .	1·5	42·6	..	..	..	1·95	55·38	..	..	..
Total, . .	..	..	828·61	767·71	3385·46	..	..	760·42	726·69	3165·47

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	118·4	109·7	483·6	3488
Female . . .	108·6	103·8	452·2	3265

Average height of male working patients is 66·5 inches, their average weight 141 lbs.

Critical Remarks.—Were some extra food given to male working patients these diets would be excellent. The average energy and proteid values are sufficient, the food is varied, condiments are used in proper quantity, and a reasonable supply of fresh vegetable is given. The weight of male working patients is below the standard. it is almost certainly due to their receiving no extras.

Haddington District Asylum.

Breakfast.—Nearly all the male and the majority of the female patients get porridge and milk only for breakfast, a considerable number of females and a few males get tea bread and butter in addition. A few of both sexes get tea bread and butter only. A special breakfast consisting of coffee, bread and butter, and ham is served to all patients on Sunday.

Dinner.—The weekly routine includes one dinner of pea soup three of broth, beef and potato, one of broth and suet pudding, one of broth, fish and potato, and one of broth, oatmeal pudding and potato. Bread is given daily. Meat is given three times a week, and the cooking of it is varied. When the supply of fish fails an extra meat dinner is given.

Evening Meal.—Tea with bread and butter or jam is given to all patients. A late supper consisting of beer and bread, or milk and bread, or gruel is given to patients desiring it.

Extras for Working Patients.—No special extras are given to working patients.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, soup, meat, potatoes, and pudding.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	16·69	474·28	86·79	89·63	..	11·25	319·5	58·46	60·38	..
Heads, Hough, &c.,	3	85·2	8·26	3·32	..	1·66	47·14	4·57	1·83	..
Ham,	3	85·2	12·35	28·28	..	2	56·8	8·23	18·85	..
Fish (Fresh),	6	170·4	28·45	·51	..	4	113·6	18·07	·34	..
Suet,	2·08	59·64	2·8	48·78	..	1·68	47·71	2·24	39·02	..
Butter,	5·74	161·88	1·61	137·59	..	4·64	130·64	1·3	111·04	..
Milk (Whole),	112·40	3192·16	105·34	127·68	159·6	77·80	2209·52	72·91	88·38	110·47
Bread,	138·62	3936·24	362·13	51·17	2090·14	82·69	2348·68	216·07	30·53	1247·14
Oatmeal,	52·92	1502·36	241·87	108·16	1014·09	35·82	1016·72	163·69	73·2	686·28
Flour,	3·92	110·76	12·62	1·1	83·73	3·23	90·88	10·36	·9	68·7
Peas,	8·84	249·92	61·48	2·49	154·95	4·91	139·16	34·23	1·39	86·27
Barley,	11·88	337·96	28·72	3·71	262·93	5·94	168·98	14·36	1·85	131·46
Sugar,	5·53	156·2	..	..	156·2	6·87	195·96	..	..	195·96
Syrup, Jam, &c.,	1·14	32·66	·12	·02	25·86	·82	23·28	·08	·01	18·28
Potatoes,	60·89	1729·56	31·13	1·72	254·24	40·62	1153·04	20·75	1·15	169·49
Fresh Vegetables,	26·28	746·92	10·45	1·49	35·85	13·35	380·56	5·32	·76	18·26
Currants,	·92	25·56	·61	·43	18·06	·75	21·3	·51	·36	15·8
Apples,	·92	25·56	·07	·07	2·76	·75	21·3	·06	·06	3·3
Tea, Coffee,	·94	26·69	..	..	..	1·16	32·94	..	..	.
Total,	..	..	994 8	606·15	4259·31	..	..	632·11	430·05	2751·41

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	142·1	86·6	608·5	3872
Female . . .	90·3	61·4	393·1	2553

Average height of male working patients is 66·2 inches, their average weight 140·6 lbs.

Critical Remarks.—From the detail of the schedule the average male diet appears to be fully sufficient, while the average female diet appears to be barely sufficient, as it is wanting both in proteid and energy. Variety of food is provided for. Fresh vegetables are used in reasonable quantity. The allowance of tea for male patients is too small. The average weight of male working patients is below the standard, 140·6 lbs. as against 145 lbs. This may be ascribed to no special allowance being made for them. The dietaries would be improved by increasing the tea allowance of males, by giving another meat dinner weekly, and by giving a luncheon to workers of both sexes.

Inverness District Asylum.

Breakfast.—The great majority of both male and female patients get porridge and milk, a few get tea bread and butter in addition.

Dinner.—The weekly routine includes one of broth and beef, one of rice soup and suet pudding, one of rice soup fish and potato, one of meat pie and potato, and one of pea soup and pork. Bread is given daily, meat four times a week.

Evening Meal.—This for all consists of tea with bread and either butter, jam, or marmalade.

Extras for Working Patients.—Females working in the laundry, kitchen, and dining hall get tea bread and cheese in the forenoon, and tea bread and butter in the afternoon. Male working patients get no extra food.

Dietary for females differs from that for males in having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	16·4	465·76	87·49	86·75	.	16·7	474·28	89·05	88·26	..
Heads, Hough, &c., .	1·03	29·25	2·83	1·14	..	1·04	29·53	2·86	1·15	..
Pork, ...	8·2	232·88	27·94	69·39	.	8·3	235·72	28·28	70·24	..
Fish (Fresh), . . .	10·3	292·52	45·81	3·22	..	10·5	298·2	46·45	3·44	..
Suet, ...	1·5	42·6	2·0	34·84	..	1·5	42·6	2·0	34·84	..
Butter, ...	3·9	110·76	1·1	94·14	..	4·5	127·8	1·27	108·63	..
Milk (Whole), . .	86·60	2459·44	81·16	98·37	122·97	90	2556	84·34	102·24	127·8
Cheese, ...	..	..	..	..	..	1·06	30·1	8·33	11·07	1·23
Bread, ...	105·5	2996·2	275·65	38·95	1590·98	85·5	2428·2	223·39	31·56	1289·37
Oatmeal, ...	36	1022·4	164·6	73·61	690·12	30	852	137·17	61·34	575·1
Flour, ...	10·3	292·52	33·34	2·92	221·14	10·5	298·2	33·99	2·98	225·43
Peas, ...	5·6	159·04	39·12	1·59	98·6	5·7	161·88	39·82	1·61	100·36
Barley, ...	6·1	173·24	14·72	1·9	134·78	6·4	181·76	15·44	1·99	141·4
Rice, ...	9·2	261·28	20·9	·78	206·41	9·5	169·8	13·58	·5	134·14
Sugar, ...	5·1	144·84	..	..	144·84	6·2	176·08	..	..	176·08
Treacle, Jam, . .	1·55	44·02	·22	·03	36·11	1·56	44·30	·22	·03	36·30
Potatoes, . . .	32·9	934·36	16·81	·93	137·35	32·9	934·36	16·81	·93	137·35
Fresh Vegetables, . .	14·8	420·32	5·88	·84	20·17	16·15	458·66	6·42	·91	32·01
Currants, . . .	·5	14·2	·34	·24	10·53	·2	5·68	·13	·09	4·21
Tea, ...	1·1	31·24	..	..	..	1·3	36·92	..	..	..
Total, . .	..	..	819·91	519·54	3414·0	..	..	749·55	521·81	2970·78

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	117·1	74·2	487·7	3169
Female . . .	107·1	74·5	424·4	2872

Average height of male working patients is 67 inches, their average weight 150·6 lbs.

Critical Remarks.—The male dietary appears to be rather small, as it meets neither the energy nor the proteid standards. It is sufficient for non-working patients, but not for working ones, and no special addition is made to satisfy their requirements; their average weight, however, appears to be good. The female diet is ample to meet the requirements of female patients, being in slight

excess of the energy and proteid standards. The allowances of potato, of fresh vegetable, and of milk are all below the average. The dietaries would be improved by giving milk more liberally, by giving potato oftener, and by giving male working patients some luncheon.

Kirklands Asylum.

Breakfast.—All male and female patients get porridge and milk and tea bread and margarine.

Dinner.—The weekly routine includes one dinner of lentil soup, pudding and bread, one of rice soup, beef and potato, one of broth, beef and potato, one of broth, sheep plucks and potato, one of tinned beef, potato, turnip and pudding, one of potato soup, bread and pudding, and one of fish, potato and pudding. Fresh beef is given on two days, tinned beef on one day, sheep pluck on one day. A small quantity of fresh beef is also used in preparing potato and lentil soup. The puddings are varied. Bread is given with two dinners only. A second potato soup dinner is sometimes given in place of the sheep pluck dinner.

Evening Meal.—This for all consists of tea bread and margarine.

Extras for Working Patients.—Those who work in the early morning receive some tea and bread. Women working in the laundry get in the forenoon some tea bread margarine and cheese, and those working in the kitchen and laundry some tea and bread in the afternoon.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	23·6	670·24	131·27	126·45	..	23·6	670·24	131·27	126·45	..
Heads, Hough, &c., .	·1	2·84	·27	·11	..	·1	2·84	·27	·11	..
Mutton, ...	4·3	122·12	28·2	10·99	6·1	4·3	122·12	28·2	10·99	6·1
Fish, ...	11·5	326·6	55·38	·97	..	11·5	326·6	55·38	·97	..
Suet, ...	1·4	39·76	1·86	32·52	..	1·4	39·76	1·86	32·52	..
Margarine, . . .	4·2	119·28	1·43	99·0	..	3	85·2	1·02	70·71	..
Milk (Whole), . . .	136	3862·4	127·45	154·49	193·12	136	3862·4	127·45	154·49	193·12
Cheese, ...	..	..	..	.	..	·1	2·84	·78	1·04	·11
Bread, &c., . . .	101·9	2893·96	265·24	39·38	1538·11	83·5	2371·40	217·17	32·59	1260·63
Oatmeal, . . .	16·8	477·12	76·81	34·35	322·05	14·7	417·48	67·21	30·05	281·79
Flour, ...	5·4	153·36	17·48	1·53	115·94	5·4	153·36	17·48	1·53	115·94
Peas, Lentils, . .	4·3	122·12	30·94	1·19	73·40	4·3	122·12	30·94	1·19	73·40
Barley, ...	2·6	73·84	6·27	8·12	57·44	2·6	73·84	6·27	8·12	57·44
Rice, ...	2·8	79·52	6·36	·23	62·82	2·8	79·52	6·36	·23	62·82
Cornflour, . . .	·8	22·72	1·61	·29	17·87	·8	22·72	1·61	·29	17·87
Sugar, ...	6·4	181·76	..	..	181·76	6·4	181·76	..	..	181·76
Jam, Marmalade, . .	2·4	68·16	·4	·06	57·59	2·4	68·16	·4	·06	57·59
Potatoes, . . .	73·5	2087·4	37·57	2·08	306·84	73·5	2087·4	37·57	2·08	306·84
Fresh Vegetables, . .	29·7	843·48	11·8	1·68	123·99	29·7	843·48	11·8	1·68	123·99
Currants, Raisins, . .	1·2	34·08	·81	·65	59·96	1·2	34·08	·81	·65	59·96
Tea, Coffee, . . .	1·8	51·12	..	..	..	1·8	51·12	..	..	..
Total, . .	..	..	801·15	514·09	3116·99	..	..	743·85	475·75	2799·46

Food Values.—The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	114·5	73·4	445·3	2977
Female . . .	106·3	68·0	399·9	2717

The average height of male working patients is 65 inches, their average weight 128·1 lbs.

Critical Remarks.—The male dietary of this asylum appears to be of too small nutritive value. It satisfies neither the energy standard nor the proteid standard. Combined with that shortage, absence of extras for male working patients is to be noted, and consequently it is not surprising to find that their average weight is decidedly below par, being 128 lbs., or 12 lbs. below the standard. The quality of the dietary is excellent, there is plenty

of variety, and condiment is sufficiently used. The female dietary appears to be excellent in all respects, it fully meets their wants, and allowance is made for the special requirements of workers. The male dietary should be increased. This might be done by increasing the allowance of oatmeal, by giving bread *ad libitum* with all dinners, and by giving working patients some luncheon.

Lanark District Asylum.

Breakfast.—All male and female patients get porridge and milk and tea bread and margarine.

Dinner.—The weekly routine includes one dinner of potato soup, bread and fruit tart, one of pea and rice soup, beef and potato, one of fresh fish, potato and pudding, one of lentil soup and potato, and two of broth, beef and potato. Beef is given three times a week. Bone or a small quantity of meat is also used in preparing two soup dinners. Bread is only given once weekly.

Evening Meal.—This for all consists of tea bread and margarine.

Extras for Working Patients.—Females in laundry get an early breakfast of tea, bread, and margarine, and those in kitchen and laundry get in the forenoon tea and bread with margarine or jam. Male working patients get no extra food.

Dietary for female patients differs from that of the males by having smaller rations of all foods and by the use of the extras already referred to.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	32	908·8	166·31	171·76	..	24	681·6	124·73	128·82	..
Fish (Fresh),	10	284	48·13	·84	..	8	227·2	38·50	·68	..
Fish (Salt),	9	255·6	69·77	·76	..	7	198·8	54·27	·59	..
Suet,	·75	21·3	1·0	17·42	..	·5	14·2	·66	11·61	..
Margarine,	4	113·6	1·36	94·28	..	3·5	99·4	1·19	82·5	..
Milk (Whole),	120	3402	112·26	136·08	170·1	120	3402	112·26	136·08	170·1
Bread,	96	2726·4	250·82	35·44	1447·71	71	2016·4	185·5	26·21	1070·7
Oatmeal,	22	624·8	103·59	44·98	421·74	18	511·2	82·3	36·8	345·06
Flour,	13·5	383·4	43·7	3·83	289·85	11·25	319·5	36·42	3·19	241·54
Peas, Lentils,	6·5	184·6	46·65	1·84	111·27	5·5	156·2	39·35	1·56	94·45
Barley,	3	85·2	7·24	·93	66·28	3	85·2	7·24	·93	66·28
Rice,	3	85·2	6·81	·25	67·3	3	85·2	6·81	·25	67·3
Sugar,	10	284	..	..	284·0	9	255·6	..	..	255·6
Jam, Marmalade,	2·25	63·9	·38	·06	53·99	2·25	63·9	·38	·06	53·99
Potatoes,	126	3578·4	64·43	3·57	526·02	98	2783·2	50·09	2·78	409·13
Fresh Vegetables,	15	426	5·96	·85	20·44	11	312·4	4·37	·62	14·99
Tea, Coffee,	1·87	53·25	..	..	..	1·87	53·25	..	..	..
Total,	..	..	928·41	512·89	3458·7	..	..	744·07	432·68	2789·14

Food Values.—The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	132·6	73·3	494·1	3251
Female . . .	106·3	61·8	398·5	2644

Average height of male working patients 65·9 inches, their average weight 135·9 lbs.

Critical Remarks.—The energy values of both the male and female dietaries appear to closely correspond with the standard, and the proteid values of both to be sufficient. The weight test, however, shows the male workers to average 4 lbs. less than the standard. This contradiction may be ascribed to male workers receiving no extra food. The diets would be improved by allowing a discretionary use of bread with all dinners and giving a luncheon to all working patients. A fourth meat dinner and a freer use of fresh vegetables are also desirable.

Midlothian District Asylum.

Breakfast.—The great majority of male and female patients have porridge and milk only. A few get tea bread and butter in addition.

Dinner.—The weekly routine includes one dinner of rice and milk and cheese, one of broth, beef and potato, one of pea soup and pudding, one of lentil soup, fish and potato, and two of Irish stew. Bread is given daily. Meat is given three times a week.

Evening Meal.—This for all consists of tea with bread and butter, and sometimes jam.

Extras for Working Patients.—Females working in the laundry get during the forenoon some tea bread and butter. Field workers during extra busy times some bread cheese and beer. Otherwise no extras to working patients are given.

Dietary for female patients differs from that for males by having smaller rations of bread and meat.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	28	795·2	145·52	150·29	..	24	681·6	124·72	128·82	..
Fish (Fresh),	9	255·6	42·68	·76	..	9	255·6	42·68	·76	..
Suet,	·75	21·3	1·0	17·42	..	·75	21·3	1·0	17·42	..
Butter,	3	85·2	·85	72·42	..	3	85·2	·85	72·42	..
Milk (Whole),	90	2556	84·34	102·24	127·8	90	2556	84·34	102·24	127·8
Cheese,	2	56·8	15·73	20·9	2·33	2	56·8	15·73	20·9	2·33
Bread,	80	2272	191·74	31·79	1179·16	64	1817·6	149·94	25·89	937·87
Oatmeal,	30	852	137·17	61·34	575·1	30	852	137·17	61·34	575·1
Flour,	2	56·8	6·47	·56	42·94	2	56·8	6·47	·56	42·94
Peas, Lentils,	7·75	220·1	55·15	2·19	133·87	7·75	220·1	55·15	2·19	133·87
Barley,	2	56·8	4·82	·62	44·19	2	56·8	4·82	·62	44·19
Rice,	3	85·2	6·81	·25	67·3	3	85·2	6·81	·25	67·3
Sugar,	5·33	151·3	..	..	151·3	5·33	151·3	..	..	151·3
Jam,	3	85·2	·5	·08	71·98	3	85·2	·5	·08	71·98
Potatoes,	112	3180·8	57·25	3·18	467·57	112	3180·8	57·25	3·18	467·57
Fresh Vegetables,	21·25	603·5	8·44	1·2	28·96	21·25	603·5	8·44	1·2	28·96
Currants, &c.,	·50	14·2	·33	·33	10·12	·50	14·2	·33	·33	10·12
Tea,	1	28·4	..	..	..	1	28·4	..	..	..
Total,	..	..	758·8	465·57	2902·62	..	..	696·2	438·2	2661·33

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	108·4	66·5	414·7	2761
Female	99·5	62·6	380·2	2548

The average height of working male patients is 65·7 inches, their average weight 137·4 lbs.

Critical Remarks.—Both the male and the female dietaries appear to be of insufficient food value, as neither meets the energy standard. The male diet also contains too little proteid. No allowance at ordinary times is made for the special wants of the male workers. That the diets are short is supported by the result of the weight test, for it is found that the average weight of the male workers is only 137 lbs., or 3 lbs. below the standard. The female diet is relatively more generous than the male diet, it more

nearly approaches the energy standard, and with it allowance is made for workers. The average issues to both males and females of bread, of butter, and of tea are below the average. The male diet would be much improved by giving more food at breakfast, either more porridge or some tea bread and butter in addition to the porridge, by increasing the allowance of bread at dinner time—at present only 2 oz.—and by giving working patients some luncheon. The female diet would be improved by giving more bread at dinner time. Butter might be used more liberally with advantage.

Perth District Asylum.

Breakfast.—For practically all patients this consists of porridge and milk only.

Dinner.—The weekly routine includes one dinner of rice and milk, bread and cheese, one of broth, tinned mutton, vegetable and bread, one of broth, beef, bread and rice or turnip, one of broth, meat pie and potato, one of broth, fish and potato, one of pea soup, pudding and bread, and one of broth and Irish stew. Fresh meat is given only once a week, tinned mutton three times, once cold, once in Irish stew, and once in meat pie. Additional small quantities of fresh meat are used in making the soups. Bread is given four times a week.

Evening Meal.—This for all consists of either tea or chocolate with bread and butter or marmalade.

Extras for Working Patients.—Females working before breakfast get tea and bread. Females in laundry get tea bread and cheese during the forenoon, those in kitchen and sewing room tea and bread in the forenoon. Other than these no extras are given to working patients.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, and pudding, and by the use of the extras referred to.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef and Mutton, . .	27·9	792·36	173·16	149·04	..	27·9	792·36	173·16	149·04	..
Heads, Hough, &c., .	4·5	127·8	12·39	4·98	..	4·5	127·8	12·39	4·08	..
Fish (Fresh), . . ,	10	284	48·13	·84	..	10	284	48·13	·84	..
Suet, ...	1·5	42·6	2·0	34·84	..	1·5	42·6	2·0	34·84	..
Lard, ...	·4	11·36	..	11·36	..	·4	11·36	..	11·36	..
Butter, ...	2·3	65·32	·65	55·52	..	2·3	65·32	·65	55·52	..
Milk (Whole), . . .	74	2101·6	69·35	84·06	105·08	74	2101·6	69·35	84·06	105·08
Cheese, ...	2·33	65·32	18·09	24·03	2·67	3·3	93·72	25·06	34·49	3·84
Bread, ...	90·4	2567·36	237·19	33·37	1363·27	94·2	2675·28	256·12	34·77	1420·57
Oatmeal, ...	31·25	887·5	142·88	63·9	599·06	28·2	800·88	128·94	57·66	540·59
Flour, ...	6·5	184·6	21·04	1·84	139·55	6·5	184·6	21·04	1·84	139·55
Peas, ...	8·6	244·24	60·08	2·44	151·42	8·6	244·24	60·08	2·44	151·42
Barley, ...	3·75	106·5	9·05	1·17	82·85	3·75	106·5	9·05	1·17	82·85
Rice, ...	3·4	96·56	7·72	·28	76·28	3·4	96·56	7·72	·28	76·28
Sugar, ...	5·75	163·3	..	..	163·3	5·75	163·3	..	..	163·3
Jam, Marmalade, . .	2·4	68·16	·4	·06	57·59	2·4	68·16	·4	·06	57·59
Potatoes, ...	49	1391·6	25·04	1·39	204·56	49	1391·6	25·04	1·39	204·56
Fresh Vegetables, . .	23·1	656·04	9·18	1·31	31·48	23·1	656·04	9·18	1·31	31·48
Currants, . . .	·8	22·72	·54	·38	16·85	·8	22·72	·54	·38	16·85
Tea, Cocoa, . . .	1	28·4	·61	·82	1·07	1·16	32·94	·61	·82	1·07
Total, . .	..	..	837·5	471·63	2995·03	..	..	850·36	477·25	2995·03

Food Values. The average food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	119·6	67·4	427·9	2871
Female . . .	121·5	68·2	427·9	2886

The average height of the male working patient is 66·5 inches, their average weight 139·8 lbs.

Critical Remarks.—The male and female dietaries appear to be of the same food value, and consequently both cannot be correct. By comparison with the standard the male dietary is found to be too small by 13 per cent., and the female diet too large by 9 per cent. No special allowance is made for male working patients. The deficiency of the male diet is shown by the fact

that the average weight of male workers is decidedly too small, it being 6 lbs. below the standard. The breakfasts for male patients are too small, it is exclusively a porridge and milk meal, and the allowances of both are no greater than those given in other asylums where bread and butter is given in addition. Fresh meat is given too seldom, and tinned meat too often. The weekly use of butter is too small, and so is that of potato. The dietaries of this asylum might with great advantage be completely revised and considerably increased.

Roxburgh District Asylum.

Breakfast.—More than one-half male and nearly one-half female patients have porridge and milk only. The remainder have tea bread and butter, either alone or with porridge and milk.

Dinner.—The weekly routine includes one dinner of rice soup, meat and potato, one of rice soup and pudding, one of broth, meat and potato, two of broth, meat, potato and vegetable, one of fish, potato and cheese, and one of pea soup and potato. Bread is given with all dinners. Meat is given four times a week.

Evening Meal.—The majority get tea bread and butter or jam, a few get porridge and milk only.

Extras for Working Patients.—Females working in laundry get tea bread and cheese. Many working male patients get bread and milk in the forenoon.

Dietary for females differs from that of the males by having less oatmeal and bread, and by them all having a luncheon consisting of bread and milk.

Additions to the ordinary dietary of this asylum are freely ordered by the medical officers. About 50 per cent. of the male and about 33 per cent. of the female patients daily receive such extras.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	21·42	608·32	116·13	114·84	..	21·42	608·32	116·13	114·84	..
Mutton,	4·1	116·44	15·13	27·94	..	4·1	116·44	15·13	27·94	..
Pork,	3·78	107·35	12·88	31·99	..	3·78	107·35	12·88	31·99	..
Fish (Fresh),	16	454·4	78·12	1·36	..	12	340·8	58·6	1·02	..
Suet,	·32	9·08	·42	7·42	..	·32	9·08	·42	7·42	..
Lard,	·53	15·05	..	15·05	..	·53	15·05	..	15·05	..
Butter,	4·15	117·86	1·17	100·18	..	4·28	121·55	1·21	103·31	..
Milk (Whole),	72	2044·8	67·47	81·79	102·24	132	3748·8	123·71	149·95	187·44
Cheese,	1·7	48·28	13·37	17·76	1·97	1·7	48·28	13·37	17·76	1·97
Bread,	94·6	2686·64	247·17	34·92	1426·6	84·7	2405·48	221·3	31·27	1277·3
Oatmeal,	43·23	1227·73	197·66	88·39	828·71	27·13	770·49	124·04	55·47	520·08
Flour,	3·87	109·9	12·52	1·09	83·08	3·87	109·9	12·52	1·09	83·08
Peas, Beans,	7·71	218·96	52·99	2·51	134·76	7·71	218·96	52·99	2·51	134·76
Barley,	3·97	112·74	9·58	1·24	87·71	3·97	112·74	9·58	1·24	87·71
Rice,	2·6	73·84	5·9	·22	58·33	2·6	73·84	5·9	·22	58·33
Sugar,	4·6	130·64	..	..	130·64	4·3	122·12	..	..	122·12
Jam,	·87	24·7	·14	·02	20·87	·87	24·7	·14	·02	20·87
Potatoes,	60·1	1706·84	30·72	1·7	250·9	60·1	1706·84	30·72	1·7	250·9
Fresh Vegetables,	23·71	673·08	9·42	1·34	32·3	23·71	673·08	9·42	1·34	32·3
Currants,	·43	12·21	·29	·2	9·05	·43	12·21	·29	·2	9·05
Tea,	1·03	29·25	..	..	..	1·07	30·38	..	..	..
Total,	..	..	871·08	529·96	3167·16	..	..	808·35	564·34	2785·91

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	124·5	75·7	452·4	3069
Female	115·5	80·6	398.0	2855

The average height of the male working patient is 67·4 inches, their average weight is 150 lbs.

Critical Remarks.—The ordinary male dietary appears to be deficient in quantity, but this shortage appears not to affect the weight of working patients. This apparent contradiction may be ascribed to an ample luncheon which is given to them as an extra. Apart from that apparent deficiency these diets appear to be good. They are varied, and vegetables and condiments are sufficiently used.

Stirling District Asylum.

Breakfast.—On week days the majority of the male and one-third of the female patients get porridge and milk only. Of those remaining most get tea bread and margarine only, while some get porridge and milk and tea bread and margarine. On Sunday all get coffee bread and margarine.

Dinner.—The weekly routine includes one dinner of broth and pudding, three of broth, meat and potato, one of broth and mutton pie, one of broth and fish, and one of pea soup and pudding. Meat is given four times a week, on two of those days tinned meat is used. Bread is given with all dinners. The puddings and the cooking of the meat are varied.

Evening Meal.—This consists of tea bread and margarine for all. About one-third of all patients get a late supper of porridge and milk.

Extras for Working Patients.—Females in the kitchen get an early breakfast of tea bread and margarine. Females in kitchen and laundry get tea bread and margarine during the forenoon, those in the laundry get cheese in addition on three days a week. Male working patients receive no extra food.

Dietary for females differs from that for males by having smaller allowance of bread, and by the use of extras already referred to.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	19·69	559·16	111·82	104·12	..	19·69	559·16	111·82	104·12	..
Heads, Hough, &c.,	4·6	130·64	12·67	5·09	..	4·6	130·64	12·67	5·09	..
Mutton,	5·23	148·53	42·77	33·86	..	5·23	148·53	42·77	33·86	..
Pork,	2·85	80·94	9·71	24·12	..	2·85	80·94	9·71	24·12	..
Fish (Fresh),	12	340·8	56·9	1·02	..	12	340·8	56·9	1·02	..
Suet,	1	28·4	1·32	23·22	..	1	28·4	1·32	23·22	..
Margarine,	5·14	145·97	1·75	121·15	..	5·14	145·97	1·75	121·15	..
Milk (Whole),	105	2982	98·4	119·28	149·1	105	2982	98·4	119·28	149·1
Cheese,	2·2	62·48	17·3	22·99	2·56	2·2	62·48	17·3	22·99	2·56
Bread,	156·49	4444·31	408·87	57·77	2359·92	103·66	2943·94	270·84	38·27	1563·23
Oatmeal,	26·6	755·44	121·62	54·39	509·92	17·15	487·06	78·41	35·06	328·76
Flour,	3·4	96·56	11·0	·96	72·99	3·4	96·56	11·0	·96	72·99
Peas,	7·7	218·68	53·79	2·18	135·58	7·7	218·68	53·79	2·18	135·58
Barley,	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice,	3·5	99·4	7·95	·29	78·53	3·5	99·4	7·95	·29	78·53
Sugar,	9·7	275·48	..	..	275·48	9·7	275·48	..	..	275·48
Syrup,	1·2	34·08	..	..	23·61	1·2	34·08	..	..	23·61
Potatoes,	58·95	1674·18	30·13	1·67	246·1	58·95	1674·18	30·13	1·67	246·1
Fresh Vegetables,	56	1590·4	22·26	3·18	76·32	56	1590·4	22·26	3·18	76·32
Tea, Coffee,	1·88	53·39	..	..	..	1·88	53·39	..	..	..
Total.	..	..	1022·74	577·16	4062·68	..	..	841·5	538·33	3084·83

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	146·1	82·5	580·4	3745
Female . . .	120·2	76·9	440·7	2872

The average height of the male working patient is 66·1 inches, their average weight 141·2 lbs.

Critical Remarks.—Both the male and the female dietaries appear to be ample and to more than meet the requirements of the standards. Variation of food is good, the use of fresh vegetable and condiment is ample. The diet would be somewhat improved by restricting the use of tinned meat and giving more of the more savoury fresh meat; tinned meat twice weekly is too much. The weight test shows that male workers are not of standard weight, that may be attributed to their receiving no extra food.

(3.) Parochial Asylums.

Govan Parochial Asylum.

Breakfast.—The majority of male patients and about one-half of the female patients get porridge and milk only. The remainder get tea bread and margarine.

Dinner.—The weekly routine includes two dinners of potato soup, meat and bread, one of broth, meat and potato, one of broth, meat pie and bread, one of pea soup, meat and potato, one of rice soup, meat and potato, and one of rice soup, pudding and bread. Meat is given six times a week, is always fresh beef, and on five days a week is served as boiled beef, on one as a meat pie. Bread is given on four days a week.

Evening Meal.—This consists of tea, bread and margarine. Coffee is given once weekly in place of tea, and either jam or marmalade in place of margarine.

Extras for Working Patients.—No extra food is given to working patients.

Dietary for females differs from that for males by having smaller rations of bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	34	965·6	176·7	182·49	..	34	965·6	176·7	182·49	..
Heads, Hough, &c.,	6	170·4	16·52	6·64	..	6	170·4	16·52	6·64	..
Suet, . . .	1·5	42·6	2·0	34·84	..	1·5	42·6	2·0	34·84	..
Lard, ...	1·5	42·6	..	42·6	..	1·5	42·6	..	42·6	..
Margarine, . . .	5	142	1·7	117·86	..	5	142	1·7	117·86	..
Milk (Whole), . .	100	2840	93·72	113·6	142·0	100	2840	93·72	113·6	142·0
Bread, ...	108	3067·2	283·18	39·87	1628·68	88	2499·2	229·92	32·48	1327·07
Oatmeal, ...	24	681·6	109·73	49·07	460·08	24	681·6	109·73	49·07	460·08
Flour, . . .	8	227·2	25·9	2·26	171·76	8	227·2	25·9	2·26	171·76
Peas, ...	4	113·6	27·94	1·13	71·43	4	113·6	27·94	1·13	71·43
Barley, ...	4	113·6	9·65	1·24	88·38	4	113·6	9·65	1·24	88·38
Rice, ...	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar, ...	6	170·4	..	..	170·4	6	170·4	..	..	170·4
Treacle, Jam, . . .	2	56·8	·17	·03	43·67	2	56·8	·17	·03	43·67
Potatoes, . . .	88	2499·2	44·98	2·49	367·38	80	2272	40·89	2·27	333·98
Vegetables, . . .	16	454·4	6·36	·9	21·81	16	454·4	6·36	·9	21·81
Currants, . . .	1	28·4	·68	·48	21·06	1	28·4	·68	·48	21·06
Tea, Coffee, . . .	1·50	42·6	..	..	..	1·50	42·6	..	..	..
Total, . .	..	..	808·31	598·9	3276·39	..	..	750·96	591·29	2941·38

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	115·5	85·5	468·1	3188
Female . . .	107·3	84·5	420·2	2948

The average height of the male working patient is 64.6 inches, their average weight 132·7 lbs.

Critical Remarks.—Both the energy value and the proteid value of the male diet are rather below the standard. That diet is ample for idle patients but hardly sufficient for working patients, and as workers get no extra diet it is probable that they are not being fully fed. The weight test shows that that is so, the average weight of male workers being 5 lbs. below the standard. The female diet is ample for both idle and working female patients. The use of fresh vegetable and condiment is sufficient. The diets are sufficiently varied. The

use of bread with all dinners, and the giving of luncheon to workers, would make the dietaries of this asylum in all ways satisfactory.

Greenock Parochial Asylum.

Breakfast.—All the male and most of the female patients get porridge and milk, some get tea bread and margarine in addition. A few females get tea bread and margarine only.

Dinner.—The weekly routine includes one dinner of pea soup, bread and cheese, one of broth, beef and potato, one of broth. beef cabbage and bread, one of broth, fish and potato, one of rice soup, suet pudding and potato, one of rice soup, beef, cabbage and bread, and one of lentil soup, beef, greens and bread. Meat is given four times a week, on one day weekly it is stewed with onion, on the other three days it is boiled. Bread is given four times a week.

Evening Meal.—This consists of tea bread and margarine for all.

Extras for Working Patients.—In the forenoon male patients get bread and cheese, and working females bread and coffee. No early breakfast or afternoon tea is given.

Dietary for females differs from that for males by having smaller rations of bread, oatmeal, meat, potato, and fish.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	41·5	1178·6	219·18	222·66	..	33	937·2	173·77	177·07	..
Heads, Hough, &c.,	12	340·8	33·05	13·29	..	10	284	27·54	11·07	..
Fish (Fresh),	6	170·4	29·3	·51	..	4·5	127·8	21·98	·38	..
Fish (Salt),	5	142	38·76	·42	..	4	113·6	31·01	·34	..
Margarine,	5	142	1·7	117·86	..	5	142	1·7	117·86	..
Milk (Whole),	80	2272	74·97	90·88	113·6	80	2272	74·97	90·88	113·6
Cheese,	4·5	127·8	35·4	47·03	5·23	4·5	127·8	35·4	47·03	5·23
Bread,	108	3067·2	283·18	39·87	1628·68	81	2300·4	211·63	29·9	1221·51
Oatmeal,	36	1022·4	164·6	73·61	690·12	30	852	137·17	61·34	575·1
Flour,	3	85·2	9·71	·85	64·41	3	85·2	9·71	·85	64·41
Peas, Lentils,	6	170·4	42·53	1·69	105·05	6	170·4	42·53	1·69	105·05
Barley,	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice,	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar,	7	198·8	..	..	198·8	9	255·6	..	..	255·6
Syrup,	1	28·4	..	..	19·68	1	28·4	..	..	19·68
Potatoes,	57	1618·8	29·13	1·61	237·96	54	1533·6	27·6	1·53	225·43
Fresh Vegetables,	35	994	13·91	1·99	47·71	35	994	13·91	1·99	47·71
Currants,	1·5	42·6	1·02	·72	31·6	1·5	42·6	1·02	·72	31·6
Tea, Coffee,	1·6	45·44	..	..	..	1·75	49·7	..	..	..
Total,	..	..	1000·0	618·26	3365·15	..	..	833·5	547·92	2887·23

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	142·8	88·3	480·7	3378
Female . . .	119·1	78·3	413·4	2907

The average height of the male working patient is 65·8 inches, their average weight 138·8 lbs.

Critical Remarks.—The male dietary of this asylum appears to be good. Its energy value nearly coincides with the standard, its proteid value is ample, sufficient allowance is made for the special wants of workers, and the use of condiment and fresh vegetable is sufficient. The female diet is also good, it is in some excess of the standard and may be rather wasteful. The average weight of male workers approaches closely the standard. A service of bread with all dinners appears to be the only necessary improvement.

Paisley, Craw Road, Parochial Asylum.

In this asylum patients are, for dietary purposes, divided into four classes.

Class C, corresponding to Class C of ordinary paupers, includes the able-bodied patients of both sexes.

Class D, corresponding to Class D of ordinary paupers, includes patients of over 60 years of age.

Class T, includes patients who cannot, or state that they cannot, take porridge, and who get tea bread and margarine in place of porridge.

*Class M, includes infirm patients selected by the Medical Officer.

At the time when the returns were made there were 109 patients in the asylum; of these 60 were in Class C, 20 in Class D, 12 in Class T, and 17, mostly women, in Class M.

Breakfast.—The breakfast for Classes C and D consists of porridge and milk, that for Classes T and M of tea bread and margarine. With Class C breakfast butter-milk is used, with Class D skimmed milk.† In porridge 5oz. of oatmeal per patient is allowed. The bread allowance is 6oz.

Dinner.—On Sundays rice and milk and bread is given to all patients. On all week days the dinner for patients in Class M consists of half a pint of sweet milk and half a pound of bread only. Patients in Classes C, D, and T on week days receive soup, meat

*Class M diet is included in this description because it is one of the regular dietaries of the institution, because details of it were returned on the schedule, and because a considerable number of the inmates, 15 per cent., were receiving it. It is not a "hospital diet" as it is given to inmates who feed in the general dining hall. (*Vide* query 40, page 18.)

†Since the return was made, sweet milk has been given with Class D breakfast.

and bread on five days a week, on three days the soup is broth, on one day rice soup and on one day pea soup. On the remaing week day the dinner for Classes C, D, and T consists of fish bread and potato. The meat allowance per patient is 6oz. cooked, equivalent to about 8oz. uncooked. On four days a week the meat is served boiled, on one day as a pie.

Evening Meal.—This for all classes consists of tea and bread, with either margarine or jelly.

Extras for Working Patients.—Patients working before breakfast get tea and bread, and females in the sewing room get tea bread and margarine in the forenoon. A considerable amount of extra food, consisting of eggs, steak, sweet milk, wine, and whisky, is given to patients in Class M.

Dietary for females is the same as that for males excepting that a larger number of females than of males are put into Class M.

Table showing Average Weekly Composition of Class C Dietary.

	MALE AND FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.			
Beef,	40	1136	207·88	214·69	...
Heads, Hough, &c.,	6·66	187·33	18·36	7·37	...
Fish (Salt),	8	227·2	62·02	·68	...
Margarine,	2·5	71	·85	58·93	...
Milk (Whole),	14·5	411·8	13·58	16·47	20·59
Milk (Butter),	105	2962	88·86	14·81	142·17
Cheese,	3	85·2	23·6	31·35	3·49
Bread,	94	2669·6	245·6	34·7	1417·55
Oatmeal,	35	994	160·03	71·56	670·95
Peas,	9·5	269·8	66·37	2·69	167·27
Barley,	6	170·4	14·48	1·87	132·57
Rice,	8	227·2	18·16	6·8	179·48
Sugar,	5·75	163·3	...	...	163·3
Marmalade,	2	56·8	·34	·05	47·99
Potatoes,	16	454·4	8·17	·45	66·79
Fresh Vegetables,	10	284	3·97	·56	13·63
Tea,	·9	25·56	...	...	...
Total,	...	...	932·27	462·98	3025·78

Table showing Average Weekly Composition of Class D Dietary.

	MALE AND FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.			
Beef, ...	40	1136	207·88	214·69	...
Heads, Hough, &c., . .	6·66	187·33	18·36	7·37	...
Fish (Salt), ...	8	227·2	62·02	·68	...
Margarine, ...	2·5	71	·85	58·93	...
Milk (Whole), . . .	14·5	411·8	13·58	16·47	20·59
Milk (Skimmed), . .	105	2982	101·38	8·94	143·13
Cheese, . . .	3	85·2	23·6	31·35	3·49
Bread, ...	94	2669·6	245·6	34·7	1417·55
Oatmeal, ...	35	994	160·03	71·56	670·95
Peas, ...	9·5	269·8	66·37	2·69	167·27
Barley, ...	6	170·4	14·48	1·87	132·57
Rice, ...	8	227·2	18·16	6·8	179·48
Sugar, ...	5·75	163·3	...	...	163·3
Marmalade, . . .	2	56·8	·34	·05	47·99
Potatoes, ...	16	454·4	8·17	·45	66·79
Fresh Vegetables, . .	10	284	3·97	·56	13·63
Tea, ...	·9	25·56	...	...	...
Total, . . .	...	...	944·79	457·11	3026·71

Table showing Average Weekly Composition of Class T Dietary.

	MALE AND FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.			
Beef, ...	40	1136	207·88	214·69	...
Heads, Hough, &c., . .	6·66	187·33	18·36	7·37	...
Fish (Salt), ...	6	170·4	46·51	·51	...
Margarine, ...	6	170·4	2·04	141·42	...
Milk (Whole), . . .	18·75	532·5	17·57	21·3	26·62
Bread, ...	123	2493·2	321·37	45·41	1854·88
Peas, ...	9·5	269·8	66·37	2·69	167·27
Barley, ...	6	170·4	14·48	1·87	132·57
Rice, ...	8	227·2	18·16	6·8	179·48
Sugar, ...	11	312·4	...	...	312·4
Marmalade, . . .	2	56·8	·34	·05	47·99
Potatoes, ...	16	454·4	8·17	·45	66·79
Fresh Vegetables, . .	10	284	3·97	·56	13·63
Tea, ...	1·75	49·7	...	...	...
Total, . . .	...	...	725·22	443·12	2801·63

Table showing Average Weekly Composition of Class M Dietary.

	MALE AND FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.			
Margarine, ...	6	170·4	2·04	141·42	...
Milk (Whole), . . .	78·75	2236·5	73·8	89·46	111·82
Bread	140	3976	365·79	51·68	2111·25
Rice, ...	4	113·6	9·08	3·4	89·74
Sugar, ...	11	312·4	...	...	312·4
Marmalade. . . .	2	56·8	·34	·05	47·99
Tea, ...	1·75	49·7	...	...	...
Total, . . .	...	...	451·05	286·01	2673·2

Table showing Total Composition of Extra Food given Weekly.

	MALE AND FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.			
Beef, ...	112	3180·8	747·48	648·88	...
Eggs (98), ...	...	5586	664·73	519·49	...
Milk (Whole), ...	700	19880	656·04	795·2	994·0
Bread, ...	28	795·2	73·15	10·33	422·25
Total, ...	...	...	2141·4	1973·9	1416·25

Table showing Composition of Average Dietary, all Patients' Extras included.

	MALE AND FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate.
	Oz.	Grms.			
Beef, ...	34·72	986·98	182·1	186·87	...
Heads, Hough, &c., . .	5·6	159·03	15·43	6·06	...
Fish (Salt), ...	5·8	164·92	44·96	·49	...
Margarine, ...	3·4	96·56	1·15	80·14	...
Eggs, ...	...	51·3	6·1	4·77	...
Milk (Whole), ...	28·6	815·64	26·9	32·62	40·77
Milk (Skimmed), . .	15·5	440·2	14·96	1·32	22·45
Milk (Butter), ...	57·5	1633	48·99	8·16	7·83
Cheese, ...	2·2	62·48	17·3	22·99	2·56
Bread, ...	104·65	2969·22	273·16	38·59	1576·65
Oatmeal, ...	26·5	752·6	121·16	54·18	508·0
Peas, ...	8	227·2	55·89	2·27	140·86
Barley, ...	5	142	12·07	1·56	110·47
Rice, ...	7·3	207·32	16·58	·62	163·78
Sugar, ...	7·1	201·64	...	...	201·64
Marmalade, ...	2	56·8	·34	·05	47·99
Potatoes, ...	13·5	383·4	6·9	·38	56·35
Fresh Vegetables, . .	8·4	238·56	3·33	·47	11·45
Tea, ...	1·13	31·8	...	...	...
Total, ...	...	...	847·31	441·54	2890·8

Food Values.—The average weekly food values of Classes C, D, T, and M diets and of the average diets of the whole asylum are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Class C, male and female	133·2	66·1	432·2	2933
,, D, ,, ,, ,,	135·0	65·3	432·4	2933
,, T, ,, ,, ,,	103·6	63·3	400·2	2654
,, M, ,, ,, ,,	64·4	40·8	381·4	2210
*Average Diet male and female	121·0	63·1	413·0	2835

* Extras included.

The average height of the male working patient is 64·8 inches, their average weight 137·1 lbs.

Critical Remarks.—The system of dietary in this asylum is essentially different from that in use in all other asylums, as it is the only asylum where lunatic patients are classified like ordinary paupers. A similar method of classification is to a limited extent found in the lunatic wards of some poorhouses, it is undesirable there, but in an asylum where all forms of insanity are received and treated it is indefensible. The division of patients into Classes C and D in particular is faulty, the difference between the two diets points to the authorities of the asylum considering that lunatics upwards of 60 years of age require some luxury (skimmed milk instead of butter-milk), while lunatics under that age require no luxury, an opinion hardly in keeping with the modern principles of the treatment of insanity. Classes T and M may be more justifiable, they may be required for the carrying out of the special dietary treatment prescribed by the Medical Officer.

The food value of the diets of all four classes is for male patients deficient in quantity, and for female patients, Class M excepted, excessive, a condition of affairs which may always be expected when males and females are fed according to the same scale. No special allowances are made for the requirements of male workers. The use of potato and of fresh vegetable is much smaller than it should be. The diets of all classes are too monotonous, in Class M particularly so, for on that diet patients, if not getting special medical extras, receive on six days a week tea bread and margarine night and morning, and milk and bread for dinner, the only relaxation for them is on Sunday, when their dinner is rice and milk and bread, instead of milk and bread. It is only right to state that medical extras appear to be freely used with Class M diet. The dietary of this asylum is so far from what it should be that a complete revision is urgently needed; in reconstructing it the dietaries of any of the neighbouring parochial asylums, Greenock, Govan, or Riccartsbar, might be taken as a model.

It is to be observed that the average weight of male working patients nearly coincides with the standard.

PAISLEY, RICCARTSBAR, PAROCHIAL ASYLUM.

Breakfast.—All patients get porridge and milk, some tea bread and butter in addition.

Dinner.—The weekly routine includes one dinner of rice and milk and cheese, three of broth, meat and potato, one of pea soup and pudding, one of pea soup, fish and potato, and one of rice and pudding. Bread is given with all dinners. Meat is given three times a week, and a small quantity used on three other days in making soup. The meat is always fresh beef.

Evening Meal.—This consists of tea bread and butter for all. Jelly is used instead of butter on Sundays.

Extras for Working Patients.—A few of both sexes get an early breakfast. All working patients get a luncheon of tea, bread and butter. Females in the kitchen and laundry get in the afternoon tea bread and butter. Working patients also get an egg with evening meal.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	24	681·6	124·72	128·82	..	24	681·6	124·72	128·82	..
Fish (Fresh),	3	85·2	14·22	·25	..	6	170·4	28·87	·50	..
Fish (Salt),	9	255·6	61·16	·76	..	6	170·4	46·51	·51	..
Suet,	4·5	127·2	6·0	99·33	..	4·5	127·8	6·0	99·33	..
Butter,	4	113·6	1·12	96·56	..	4	113·6	1·12	96·56	..
Eggs,	4·2	119·28	14·19	11·09	..	8·2	232·88	27·71	21·65	..
Milk,	150	4260	140·58	170·4	233·0	150	4260·0	140·58	170·4	233·0
Cheese,	2	56·8	15·73	20·9	2·32	2	56·8	15·73	20·9	2·32
Bread,	88	2499·2	229·92	32·48	1327·07	72	2044·8	188·12	26·58	1085·78
Oatmeal,	31	880·4	141·74	63·38	594·27	21	596·4	96·02	42·94	402·57
Flour,	8	227·2	25·9	2·26	171·76	8	227·2	25·9	2·26	171·76
Peas,	10	284	69·84	2·84	176·08	10	284	69·84	2·84	176·08
Barley,	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice,	4·5	127·8	10·22	·38	10·09	4·5	127·8	10·22	·38	10·09
Sugar,	4·75	134·9	..	..	134·9	4·75	134·9	..	..	134·9
Syrup, Jam, &c.,	3·5	99·4	·25	·04	75·35	3·5	99·4	·25	·04	75·35
Potatoes,	64	1817·6	32·7	1·8	267·18	64	1817·6	32·7	1·8	267·18
Fresh Vegetables,	12	340·8	4·77	·68	16·35	12	340·8	4·77	·68	16·35
Currants,	1	28·4	·68	·48	21·06	1	28·4	·68	·48	21·06
Tea,	1·5	42·6	..	..	..	1·5	42·6	..	..	..
Total,	..	..	908·22	634·32	3162·0	..	..	834·22	618·54	2729·01

Food Values.—The average weekly food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	129·7	90·6	451·7	3227
Female . . .	119·2	88·4	329·6	2909

The average height of the male working patient is 65·6 inches, their average weight 135·5 lbs.

Critical Remarks.—The dietaries of this asylum, excepting that the male diet is rather short of standard value, appear to be excellent. The variety of food, the use of fresh vegetable and condiment, and the special allowance for working patients are all that can be desired. The average weight of male workers is 4½ lbs. below the average. The adddition of some bread to the present exclusively porridge breakfast would raise the energy value of the diet to the necessary amount.

(4.) Lunatic Wards of Poorhouses.

Aberdeen East Poorhouse.

Breakfast.—The majority of male patients get porridge and skimmed milk only. The majority of the females get porridge with milk and tea bread and butter. The remainder of both sexes get tea bread and butter only.

Dinner.—The weekly routine includes one dinner of rice soup bread and cheese, one of broth, mutton and potato, two of broth, beef and bread, one of pea soup, pudding and bread, one of pea soup, fish and potato, and one of rice soup, beef and pudding. Meat is given four times a week, on three days beef is given, on one mutton. The cooking of the beef is varied. The puddings are varied. An additional beef dinner is frequently given in place of the pea soup pudding and bread dinner. With all dinners, the rice soup, beef and pudding dinner excepted, either bread or potato is given *ad libitum.*

Evening Meal.—This consists of tea bread and butter for all, jam occasionally instead of butter. Nearly all the males, and about one-third of the females, get late supper consisting of porridge and milk.

Extras for Working Patients.—Male and female patients working before breakfast receive an allowance of tea bread and butter. All working patients get milk and bread for luncheon.

Dietary for females differs from that for males by having smaller rations of oatmeal and by fewer getting late supper.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	13	369·2	67·56	69·77	..	12	340·8	62·36	64·41	..
Mutton,	4	113·6	14·76	27·26	..	4	113·6	14·76	27·26	..
Fish (Fresh),	2	56·8	9·62	·18	..	1·5	42·6	7·18	·13	..
Fish (Salt),	4·5	127·8	34·88	·38	..	3	85·2	23·25	·25	..
Suet,	4	113·6	5·33	92·92	..	4	113·6	5·33	92·92	..
Butter,	3·5	99·4	·98	84·48	..	7	198·8	1·96	168·96	..
Milk (Whole),	10	284	9·37	11·36	14·2	20	568	18·74	22·72	28·0
Milk (Skimmed),	280	7952	270·36	23·84	405·54	210	5964	202·77	17·89	304·16
Cheese,	4	113·6	31·46	41·8	4·65	4	113·6	31·46	41·8	4·65
Bread,	76	2158·4	198·57	28·05	1146·11	116	3294·4	303·08	42·82	1749·32
Oatmeal,	82·5	2343	377·22	168·69	1581·52	37·7	1070·68	172·37	77·08	722·7
Flour,	9	255·6	29·12	2·54	193·22	8	227·2	25·9	2·26	171·76
Peas,	4	113·6	27·94	1·13	71·43	4	113·6	27·94	1·13	71·43
Barley,	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice,	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar,	3·5	99·4	..	..	99·4	7	198·8	..	..	198·8
Syrup, Jam,	1·5	42·6	·08	·01	31·67	1·5	42·6	·08	·01	31·67
Potatoes,	60	1704	30·67	1·7	250·48	50	1420	25·56	1·42	208·74
Fresh Vegetables,	10	284	3·97	·56	13·63	10	284	3·97	·56	13·63
Currants, Raisins,	1·0	28·4	·67	·66	20·25	1·0	28·4	·67	·66	20·25
Tea, Coffee,	1·4	39·76	..	..	..	2·25	63·9	..	..	..
Total,	..	..	1136·12	560·6	4054·41	..	..	950·94	567·55	3747·42

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	162·3	80·1	579·2	3785
Female	135·8	81·1	535·3	3506

The average height of the male working patient is 65·5 inches, their average weight 144·2 lbs.

Critical Remarks.—The diets, both male and female, are in considerable excess of the standard; they may be wasteful, but they certainly are sufficient to secure that all inmates are fully fed. Ample provision is made for the wants of working patients. The variation of the diet and the use of condiment are both good. Oatmeal here is sufficiently used to meet local

habit, but is not used to the exclusion of bread and meat. The excellence of the male dietary is corroborated by the weight test.

Aberdeen West Poorhouse.

Breakfast.—The majority of men, and one-third of the women, get porridge and milk only. The remainder get tea, bread and butter.

Dinner.—The weekly routine includes one dinner of rice and milk and cheese, two of broth, beef and potato, one of broth and suet pudding, one of potato soup, one of rice soup and beef, and one of pea soup and fish. Bread is given daily. Meat is given three times a week, it it invariably boiled beef. Small quantities of meat are also used in preparing the soup of other dinners.

Evening Meal.—The majority of the male patients, and about one-third of the female patients (the same number of both sexes as at breakfast), get porridge and milk only. The remainder get tea, bread, and butter.

Extras for Working Patients.—Male patients working in the forenoon receive some milk and bread; female patients working in the forenoon get some tea and bread, with some cheese as an addition on washing days.

Dietary for females differs from that for males by having smaller rations of porridge, smaller rations of bread at breakfast and tea, and by a larger number having tea bread and butter at breakfast and tea.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	12	340·8	62·36	64·41	..	12	340·8	62·36	64·41	..
Heads, Hough, &c.,	1·5	42·6	4·13	1·66	..	1·5	42·6	4·13	1·66	..
Fish (Fresh),	8	227·2	37·94	·68	..	8	227·2	37·94	·68	..
Suet,	2·5	71	3·33	58·07	..	2·5	71	3·33	58·07	..
Butter,	1·4	39·76	·39	33·79	..	4·9	139·16	1·39	118·28	..
Milk (Whole),	180	5112	168·69	204·48	255·6	60	1704	56·23	68·16	85·2
Milk (Skimmed),	74	2101·6	71·45	6·3	107·18	56	1590·4	54·07	4·77	81·11
Cheese,	·3	85·2	23·6	31·35	3·49	5	142	39·33	52·25	5·82
Bread,	74·1	2104·44	193·6	27·35	1117·45	90·5	2570·2	236·45	33·41	1364·77
Oatmeal,	69	1959·6	315·49	141·09	1322·73	22·5	639	102·87	46·0	431·32
Flour,	6·5	184·6	21·04	1·84	139·55	6·5	184·6	21·04	1·84	139·55
Peas,	5	142	34·02	1·42	88·04	5	142	34·02	1·42	88·04
Barley,	6	170·4	14·48	1·86	132·56	6	170·4	14·48	1·86	132·56
Rice,	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar,	1·5	42·6	..	..	42·6	8	227·2	..	..	227·2
Jam,	..	..	..	..	..	2·3	65·32	·39	·06	55·19
Potatoes,	56	1590·4	28·62	1·59	233·78	56	1590·4	28·62	1·59	233·78
Fresh Vegetables,	8	227·2	3·18	·45	10·9	8	227·2	3·18	·45	10·9
Tea,	·3	8·52	..	..	..	2·7	76·68	..	..	..
Total,	..	..	992·3	579·74	3543·62	..	..	709·81	458·31	2945·18

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	141·8	82·8	506·2	3426
Female . . .	101·4	65·5	420·7	2750

The average height of the male working patient is 65·9 inches, their average weight 137 lbs.

Critical Remarks.—The food values of both dietaries appear to be sufficient, but the weight test shows that the working male patients are not receiving a sufficiency, for their average weight is 3 lbs. below the standard. This anomaly may be ascribed to the extreme monotony of the diet. The twice daily porridge, the small use of meat, the invariable boiling of the meat, the meagre allowance of tea, the small use of fresh vegetable, all contribute to making the diet untempting and monotonous. I am of opinion that a diet of the same food value but of a more varied and pleasing description would be found to nourish the inmates better.

Buchan Poorhouse.

Breakfast.—Nearly all the patients receive porridge and milk; the majority of females, and about half the males, get tea bread and butter in addition. The few who do not get porridge have tea bread and butter only.

Dinner.—The weekly routine includes one dinner of broth, bread and cheese, two of broth, beef and potato, one of broth, beef and bread, one of potato soup, bread and cheese, one of pea soup, bread and pudding, and one of pea soup, fish and bread. Meat is given on three days a week, and is invariably boiled beef. Bread is given three times a week. Rice and milk is given to some patients twice a week in lieu of pea soup.

Evening Meal.—All female and most male patients get tea bread and butter only. A few males get porridge and skim milk.

Extras for Working Patients.—Bread and syrup is given to all workers as luncheon daily, except on Monday when men get bread and cheese, and women bread and coffee.

Dietary for females differs from that for males by having smaller rations of porridge and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	13	369·2	67·56	39·77	..	12	340·8	62·36	64·41	..
Fish (Salt),	4	113·6	31·01	·34	..	4	113·6	31·01	·34	..
Suet,	1	28·4	1·32	23·22	..	1	28·4	1·32	23·22	..
Butter,	3	85·2	·85	72·42	..	2	56·8	·56	48·28	..
Milk (Skimmed),	140	3976	135·18	11·92	202·77	100	2840	96·56	8·52	144·84
Cheese,	4·5	127·8	35·4	47·02	5·23	4·5	127·8	35·4	47·02	5·23
Bread,	117·5	3337	307	43·38	1771·94	89	2527·6	232·53	32·85	1342·15
Oatmeal,	50	1420	228·62	102·24	958·5	30	852	137·17	61·34	575·1
Flour,	4	113·6	12·95	1·13	85·88	4	113·6	12·95	1·13	85·88
Peas,	6	170·4	41·91	1·7	105·64	5	142	34·92	1·42	88·04
Barley,	8	227·2	19·3	2·48	176·76	7	198·8	16·89	2·18	154·66
Rice,	5	142	11·36	·42	112·18	5	142	11·36	·42	112·18
Sugar,	4	113·6	..	..	113·6	4	113·6	..	..	113·6
Syrup, &c.,	2	56·8	..	..	39·36	2	56·8	..	..	39·36
Potatoes,	64	1817·6	32·7	1·8	267·18	48	1363·2	24·52	1·36	200·38
Fresh Vegetables,	16	454·4	6·36	·9	21·81	16	454·4	6·36	·9	21·81
Currants, Raisins,	·10	28·4	·67	·66	20·25	·50	14·2	·33	·33	10·12
Tea, Coffee,	1·12	31·95	..	..	..	1·12	31·95	..	..	..
Total,	..	:	932·19	379·4	3881·1	..	..	714·24	293·72	2893·35

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	133·2	52·2	544·4	3323
Female	102·0	41·9	413·3	2503

The average height of the male working patient is 65·9 inches, their average weight 139·1 lbs.

Critical Remarks.—The food value of the male diet is sufficient, that of the female barely so. Some extra food is given to workers. The weight test shows male working patients to average very nearly the standard weight. The diets, however, are faulty in two respects, the division into meals is unequal and the dinners are unduly monotonous. The inequality of meals is specially noticeable in the male dietary. In the schedule it is reported that about half of the male patients have a breakfast consisting of oatmeal 6 oz., skimmed milk 15 oz., bread 8 oz., butter 1 oz., sugar ½ oz., and tea; such a meal has an energy value of more than 1800 calories.

which is more than one-half of the entire day's food, and from such a meal a very considerable waste may be expected. The monotony of the dinners is due to the routine including two soup bread and cheese dinners, and three boiled beef dinners. Desirable changes of these dietaries are a revision of the dinner routine, including more meat dinners, varying the cooking of the meat and using fresh vegetables more freely, and rearranging the issues of bread, giving less of it along with the ample porridge ration at breakfast time and more of it with the dinners.

Cunningham Poorhouse.

Breakfast.—The majority of both sexes get porridge and skim milk only. The remainder get tea bread and margarine only.

Dinner.—The weekly routine includes three dinners of broth and boiled beef, one of broth and meat pie, one of pea soup and boiled beef, and one of broth, fish and potato. Bread is given daily, meat five times a week.

Evening Meal.—This consists of tea bread and margarine for all. On Sundays coffee is given in place of tea and jam in place of margarine.

Extras for Working Patients.—Working men get bread and cheese and some milk at breakfast time in addition to their ordinary breakfast. Working women get tea, bread and margarine in addition to their ordinary breakfast.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	20	568	103·94	107·35	..	20	568	103·94	107·35	..
Fish (Fresh),	8	227·2	39·06	·68	..	8	227·2	39·06	·68	..
Margarine,	3·5	99·4	1·19	82·5	..	6·5	184·6	2·21	153·21	..
Milk (Whole),	7	198·8	6·56	7·05	9·94	7	198·8	6·56	7·95	9·94
Milk (Skimmed),	285	8094	275·19	24·28	412·79	225	6390	217·26	19·17	325·89
Cheese,	14	397·6	110·13	146·31	16·3	2	56·8	15·73	20·9	2·33
Bread,	120	3408	313·53	44·3	1809·64	114	3237·6	297·85	42·08	1719·16
Oatmeal,	42	1192·8	192·04	85·88	805·14	35	994	160·03	71·56	670·95
Peas,	4·5	127·8	31·43	1·27	79·23	4·5	127·8	31·43	1·27	79·23
Barley,	10	284	24·14	3·12	220·95	10	284	24·14	3·12	220·95
Rice,	2	56·8	4.54	1·7	44·87	2	56·8	4·54	1·7	44·87
Sugar,	4	113·6	..	..	113·6	7	198·8	..	..	198·8
Jam, Marmalade,	1	28·4	·17	·03	23·99	1	28·4	·17	·03	23·99
Potatoes,	16	454·4	8·17	·45	66·79	16	454·4	8·17	·45	66·79
Fresh Vegetables,	37·5	1065	14·91	2·13	51·12	37·5	1065	14·91	2·18	51·12
Tea, Coffee,	1·05	29·82	..	..	..	1·75	49·7	..	..	..
Total,	..	..	1125·0	507·95	3654·36	..	..	926·0	431·6	3414·02

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	160·7	72·6	522·0	3474
Female . . .	132·3	61·6	483·7	3115

The average height of the male working patient is 65·3 inches, their average weight 146·2 lbs.

Critical Remarks.—Both dietaries are of ample energy value, and that they are so is supported by the result of the weight test. The working male patients average 6 lbs. more than the standard. The female dietary is in excess of the standard food value. The use of milk in these lunatic wards is exceptionally generous and is to be commended. In these dietaries potato is not sufficiently used, it is only given once a week in soup and never with meat. Desirable improvements of these dietaries could be effected by the freer use of potato, and by giving the working patients their extra food during the forenoon instead of at breakfast time.

Dumbarton Combination Poorhouse.

Breakfast.—About one-half of the male patients get porridge and milk only, all others get porridge and milk and tea bread and margarine.

Dinner.—The weekly routine includes two dinners of broth, beef and bread, two of pea soup, dried ling and potato, one of broth beef and pudding, and one of rice soup, bread and cheese. Meat is given three times a week, invariably as boiled beef. Bread is given four times a week.

Evening Meal.—About one-half of the male patients get porridge and milk only (the same patients as do so at breakfast), the rest of the males get porridge and milk with tea bread and margarine. The females get tea bread and margarine only.

Extras for Working Patients.—A few get tea bread and margarine in the early morning. Women in the laundry get for lunch some bread and cheese and coffee. Working male patients receive the larger breakfast referred to above.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, cheese, and potato.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	18	511·2	93·54	96·61	..	18	511·2	93·54	96·61	..
Heads, Hough, &c., .	8	227·2	22·03	8·86	..	8	227·2	22·03	8·86	..
Fish (Salt), . . .	12	340·8	93·02	1·02	..	12	340·8	93·02	1·02	..
Suet, ...	1·5	42·6	2	34·84	..	1·5	42·6	2·0	34·84	..
Margarine, . . .	3·3	93·72	1·12	77·78	..	7·5	213	2·55	176·79	..
Milk (Whole), . . .	145	4118	135·89	164·72	205·9	86·6	2459·44	81·16	98·37	122·97
Cheese, ...	4	113·6	31·46	41·8	4·65	6·75	191·7	53·1	70·54	7·85
Bread, ...	58	1647·2	151·54	21·41	874·66	104	2953·6	271·73	38·39	1568·36
Oatmeal, ...	84	2385·6	384·08	171·76	1610·28	28	795·2	128·02	57·25	536·76
Flour, ...	4	113·6	12·95	1·13	85·88	4	113·6	12·95	1·13	85·88
Peas, ...	6	170·4	41·91	1·7	105·64	6	170·4	41·91	1·7	105·64
Barley, ...	8	227·2	19·3	2·48	176·76	8	227·2	19·3	2·48	176·76
Rice, ...	1·5	42·6	3·4	·12	33·65	1·5	42·6	3·4	·12	33·65
Sugar, ...	4	113·6	..	..	113·6	9	255·6	..	..	255·6
Potatoes, . . .	96	2726·4	49·04	2·72	400·76	72	2044·8	36·8	2·04	300·58
Fresh Vegetables, . .	11·75	333·7	4·67	·66	16·01	11·75	333·7	4·67	·66	16·01
Tea, Coffee, . . .	·9	25·56	..	..	..	2·4	68·16	..	..	..
Total, . .	..	..	1045·95	627·61	3627·79	..	..	866·18	590·8	3210·06

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	149·4	89·6	518·3	3571
Female	123·7	84·4	458·6	3172

The average height of the male working patient is 66·3 inches, their average weight 146·9 lbs.

Critical Remarks.—The energy and proteid values of these diets are both ample, they both exceed the standard. The requirements of working patients are fully met. The diet, however, is faulty on account of its monotony. Half of the male patients are restricted to porridge and milk twice daily, and never get tea. The twice weekly use of dried ling must also be found monotonous. The issues of milk and potato are both commendably generous. The diet would be greatly improved by giving a tea bread and butter supper to all patients, by varying the cooking of the meat, and by restricting the use of dried ling, giving more meat in its stead. The weight test shows that the average weight of male

workers is quite satisfactory. The monotony of the feeding of male workers is relieved by their having tea at breakfast time.

Dundee East Poorhouse.

Breakfast.—The majority of male patients and a minority of female patients get porridge and skimmed milk only. The remainder get tea bread and butter only.

Dinner.—The weekly routine includes one dinner of lentil soup and meat, two of broth and meat, one of pea soup, meat and suet pudding, one of Irish stew, one of rice and milk, and one of broth and fish. Meat is given five times a week, and is always beef. On four days it is boiled, on one day stewed. Bread is given daily, except with the pea soup, beef and suet pudding dinner. Potato is given twice a week.

Evening Meal.—This consists of tea, bread and butter for all male and nearly all female patients. The remaining few females get porridge and milk. Jelly and marmalade are each given once weekly instead of butter.

Extras for Working Patients.—Working male patients are given a luncheon of bread with cheese or tinned mutton. Female patients receive smaller rations of the same with some tea in addition.

Dietary for females differs from that for males by their having a different breakfast, and smaller rations of oatmeal, bread, and pudding.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	23·6	670·24	122·65	126·67	..	23·3	661·72	121·09	125·06	..
Fish (Fresh),	9·3	264·12	44·1	·79	..	9	255·6	42·68	·76	..
Suet,	2	56·8	2·66	46·46	..	2	56·8	2·66	46·46	..
Butter,	2·75	78·1	·78	66·38	..	6·1	173·24	1·73	147·25	..
Milk (Whole),	38	1079·2	35·61	43·16	53·96	52	1476·8	48·73	59·07	73·84
Milk (Skimmed),	96	2726·4	92·69	8·17	139·04	..	..	..	..	..
Cheese,	5·7	161·88	44·84	59·57	6·63	2·7	76·68	21·24	28·21	3·14
Bread,	118·9	3376·76	310·66	43·89	1793·05	143·7	4081·08	375·45	53·05	2167·05
Oatmeal,	38·5	1093·4	176·03	78·72	738·04	3·9	110·76	17·83	7·97	74·76
Flour,	5·4	153·36	17·48	1·53	115·94	4·5	127·8	14·56	1·27	96·61
Peas, Lentils,	8·3	235·72	59·04	2·35	143·43	8·3	235·72	59·04	2·35	143·43
Barley,	5·9	167·56	14·24	1·81	130·36	6·1	173·24	14·72	1·9	134·78
Rice,	3	85·2	6·81	·25	67·3	2·6	73·84	5·9	·22	58·33
Sugar,	4·6	130·64	..	..	130·64	8·6	244·24	..	..	244·24
Syrup, Jam, &c.,	3·25	92·3	·42	·07	74·75	4·55	129·22	·64	·1	105·95
Potatoes,	22·0	650·36	11·7	·65	95·6	24	681·6	12·26	·68	100·19
Fresh Vegetables,	18·5	525·4	7·35	1·05	25·21	18·5	525·4	7·35	1·05	25·21
Currants, Raisins,	1·0	28·4	·67	·66	20·25	·10	28·4	·67	·66	20·25
Tea,	·9	25·56	..	..	..	1·9	53·96	..	..	..
Total,	..	..	947·73	482·21	3534·2	..	..	746·55	476·06	3247·78

Food Values. The average daily food values of the male and female dietaries are as follows :—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	135·4	68·9	504·9	3266
Female . . .	106·6	68·0	464·0	2973

The average height of the male working patient is 65·3 inches their average weight 133·8 lbs.

Critical Remarks.—The male dietary is of rather less than standard food value, the female is of ample food value. Special allowance is made for the wants of working patients. The use of potato for both sexes and of tea for males is too small. The weight test shows that average weight of male working patients is fully 6 lbs. below the standard; why this is so is not apparent. A freer use of potato would greatly improve the diet, and so would the addition of some bread to all breakfasts. A more generous allowance of tea for male patients is also desirable.

Dundee West Poorhouse.

Breakfast.—About one-half of both male and female patients get porridge and skim milk only. The remainder get tea bread and butter only,

Dinner.—The weekly routine includes two dinners of broth, meat and bread, two of broth, meat and potato, one of broth and fish, one of lentil soup and meat, and one of lentil soup and pudding. Meat is given five times a week, it is invariably boiled beef. Bread is given daily.

Evening Meal.—About two-thirds of the patients get tea bread and butter only. The remainder get porridge and skim milk. No patients are restricted to porridge and milk twice daily to the exclusion of tea and bread.

Extras for Working Patients.—Working patients get a luncheon consisting of tea, bread and butter.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, and pudding.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	34	965·6	176·7	182·49	..	34	965·6	176·7	182·49	..
Fish (Fresh),	8·75	248·5	41·49	·74	..	8·75	248·5	41·49	·74	..
Suet,	·5	14·2	·66	11·61	..	·5	14·2	·66	11·61	..
Butter,	4	113·6	1·13	96·56	..	5	142	1·42	120·7	..
Milk (Whole),	10	284	9·37	11·36	14·2	10	284	9·37	11·36	14·2
Milk (Skimmed),	90	2556	86·9	7·66	130·35	60	1704	57·93	5·11	86·9
Bread,	107	3038·8	279·56	39·5	1613·6	104	2953·6	271·73	38·39	1568·36
Oatmeal,	37	1050·8	169·17	75·65	709·29	21	596·4	96·02	42·94	402·57
Flour,	6	170·4	19·42	1·7	128·82	5	142	16·18	1·42	107·35
Peas, Lentils,	9·5	269·8	68·55	2·69	161·70	9·5	269·8	68·55	2·69	161·70
Barley,	10	284	24·14	3·12	220·95	10	284	24·14	3·12	220·95
Sugar,	4	113·6	..	..	113·6	5	142	..	..	142·0
Potatoes,	32	908·8	16·35	·9	133·59	32	908·8	16·35	·9	133·59
Fresh Vegetables,	10·4	295·36	4·13	·59	14·17	10·4	295·36	4·13	·59	14·17
Raisins,	1	28·4	·65	·85	19·45	1	28·4	·65	·85	19·45
Tea,	1	28·4	..	..	..	1·25	35·5	..	..	..
Total,	..	..	898·22	435·42	3259·72	..	..	785·32	422·91	2871·24

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	128·3	62.2	465·7	3014
Female	112·2	60·4	410·2	2703

The average height of the male working patient is 65·2 inches, their average weight 125·9 lbs.

Critical Remarks.—The dietary for male patients is of insufficient food value, and although working patients receive some extra food they are decidedly below their normal weight; their average is no less than 14 lbs. below the standard. The female diet appears to be of ample quantity. Necessary improvements of these dietaries are a more liberal use of bread with all dinners, a fuller allowance of vegetables, and some variation in the cooking of the meat.

Edinburgh (Craiglockhart) Poorhouse.

Breakfast.—The male patients get porridge and butter-milk only. The female patients get tea bread and butter.

Dinner.—The weekly routine includes three dinners of broth, meat and potato, one of broth, meat and bread, one of pea soup with either meat pie or Irish stew, one of rice soup and fish, and one of rice soup and cheese. Bread is given with all dinners. Meat is given five times a week, it is invariably beef, and is served four times a week as boiled beef, and once a week as meat pie or Irish stew.

Evening Meal.—All males get tea, bread and butter only. All females get porridge and skim milk, a few of them get tea, bread and butter in addition.

Extras for Working Patients.—A few patients get an early breakfast, other than that no extras are given to workers.

Dietary for females differs from that for males by having smaller rations of oatmeal and cheese, by having skimmed milk with porridge, and by having pudding once weekly instead of beef.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	44	1249·6	228·67	236·17	..	38	1079·2	197·49	203·96	..
Fish (Fresh),	12	340·8	57·75	1·02	..	12	340·8	57·75	1·02	..
Suet,	..	..	..	..	..	1·14	32·37	1·52	26·47	..
Butter,	3·5	99·4	·99	84·49	..	4	113·6	1·12	96·56	..
Milk,*	105	2982	89·46	14·91	143·13	60	1704	57·93	5·11	86·9
Cheese,	4	113·6	31·46	41·8	4·65	2	56·8	15·73	20·9	2·33
Bread,	123	3493·2	321·37	45·41	1854·88	87·5	2485	228·62	32·3	1319·53
Oatmeal,	42	1192·8	192·04	85·88	805·14	30	852	137·17	61·34	575·1
Flour,	1·5	42·6	4·85	·43	32·21	3·1	88·04	10·03	·88	66·65
Peas,	5·5	156·2	38·42	1·56	96·84	6	170·4	41·91	1·7	105·64
Barley,	8	227·2	19·3	2·48	176·76	10	284	24·14	3·12	220·95
Rice,	4	113·6	9·08	3·4	89·74	2	56·8	4·54	1·7	44·87
Sugar,	2·62	74·4	..	..	74·4	3	85·2	..	..	85·2
Potatoes,	40	113·6	20·44	1·13	166·09	40	1136	20·44	1·13	166·99
Fresh Vegetables,	28	795·2	11·13	1·59	38·16	28	795·2	11·13	1·59	38·16
Tea,	·9	25·56	..	..	..	1	28·4	..	..	..
Total,	..	..	1024·96	520·27	3482·9	..	..	809·52	457·78	2712·22

* Butter-milk for males, skimmed milk for females.

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	146·4	74·3	497·5	3331
Female	115·6	65·4	387·5	2671

The average height of the male working patient is 66·5 inches, their average weight 143·8 lbs.

Critical Remarks.—The quantity of both dietaries is ample, and the food values of both practically coincide with the standards. No special provision is made for the wants of working patients. The issue of tea appears to be too small. Were this increased, and were workers allowed some luncheon, the dietaries of these lunatic wards would be excellent. The weight test shows the average weight of working patients to be slightly below the standard.

Inveresk Poorhouse.

Breakfast.—This consists of porridge and skimmed milk for all patients.

Dinner.—The weekly routine includes two dinners of broth, meat and vegetable, one of broth and Irish stew, one of rice soup, meat and suet pudding, one of rice soup, fish and potato, one of pea soup, meat and pease pudding, and one of coffee and cheese. Bread is given at all dinners, the fish dinner excepted. Meat is given five times a week, on three occasions as boiled beef, on one as boiled mutton, and on one as beef cooked in Irish stew.

Evening Meal.—This consists of tea bread and butter for all.

Extras for Working Patients.—An early breakfast is given to four working patients, other than that no extras are given to any working patients.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, cheese, meat, and fish.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	30	852	155·91	161·02	..	20	568	103·94	107·35	..
Heads, Hough, &c., .	·5	14·2	1·37	·55	..	·5	14·2	1·37	·55	..
Mutton, ...	6	170·4	22·15	40·89	..	4	113·6	14·76	27·26	..
Fish (Salt), . . .	8	227·2	62·02	·68	..	6	170·4	46·51	·51	..
Suet, ...	·5	14·2	·66	11·61	..	·5	14·2	·66	11·61	..
Butter, ...	1·75	49·7	·49	42·24	..	1·75	49·7	·49	42·24	..
Milk (Skimmed), . .	116	3294·4	112·0	9·88	168·01	116	3294·4	112·0	9·88	168·01
Cheese, ...	4	113·6	31·46	41·8	4·65	3	85·2	23·6	31·35	3·49
Bread, ...	104	2953·6	271·73	38·39	1568·36	80	2272	209·02	29·53	1206·53
Oatmeal, ...	42	1192·8	192·04	85·88	805·14	28	795·2	128·02	57·25	536·76
Flour, ...	4	113·6	12·95	1·13	85·88	4	113·6	12·95	1·13	85·88
Peas, ...	6·5	184·6	45·41	1·84	114·45	6·5	184·6	45·41	1·84	114·45
Barley, ...	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice, ...	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar, ...	4	113·6	..	..	113·6	4	113·6	..	..	113·6
Syrup, Jam, &c., . .	2·5	71·0	·34	·05	57·83	2·5	71	·34	·05	57·83
Potatoes, . . .	34	965·6	17·38	·96	141·94	34	965·6	17·38	·96	141·94
Fresh Vegetables, . .	24	681·6	9·54	1·36	32·71	24	681·6	9·54	1·36	32·71
Tea, Coffee, . . .	1·1	31·24	..	..	..	1·1	31·24	..	..	..
Total, . .	..	..	959·01	443·55	3314·88	..	..	749·55	328·14	2683·51

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	137·0	63·4	473·5	3062
Female . . .	107·1	46·9	383·4	2447

The average height of the male working patient is 63·1 inches, their average weight 131·2 lbs.

Critical Remarks.—The diets, both male and female, appear to be of less than standard food value. They have sufficient proteid but insufficient energy. Both diets may be taken as sufficient for idle patients, but as insufficient for workers. No special allowance is made to meet the wants of workers. Of individual food-stuffs bread and potato may be selected as being issued in less than usual quantities. The diets in other ways are good, and are sufficiently varied. The diets would be made quite satisfactory by giving some luncheon to working patients, and by using potato more freely.

Kincardine Poorhouse.

Breakfast.—The majority of both sexes get porridge and milk only, the remainder get tea, bread and margarine.

Dinner.—The weekly routine includes one dinner of broth and cheese, one of broth, salt beef and rice pudding, one of broth, salt beef with oatmeal pudding or mashed cabbage occasionally added, one of broth, fish and potato, one of broth and suet pudding, one of pea soup and Irish stew, and one of potato soup and stewed beef. Bread is given with all dinners. Meat is given four times a week, salt beef being used twice weekly and fresh beef twice weekly. The cooking of the meat is varied.

Evening Meal.—This consists of tea, bread and margarine for all.

Extras for Working Patients.—Tea, bread and either margarine or marmalade is given to some women as an early breakfast. A luncheon of tea, bread and either margarine or marmalade is given to all workers.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, and pudding.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	26	738·4	157·83	138·98	..	26	738·4	157·83	138·98	..
Fish (Salt),	8	227·2	62·02	·68	..	8	227·2	62·02	·68	..
Suet,	2·5	71	3·33	58·07	..	2·5	71	3·33	58·07	..
Butter,	4·8	136·32	1·36	115·87	..	4·8	136·32	1·36	115·87	..
Milk (Whole),	44	1249·6	41·23	49·98	62·48	38	1079·2	35·61	43·16	53·96
Cheese,	2	56·8	15·73	20·9	2·33	2	56·8	15·73	20·9	2·33
Bread,	149·1	4234·44	389·56	55·04	2248·48	128·7	3655·08	336·36	47·51	1940·84
Oatmeal,	26·5	752·6	121·16	54·18	508·0	15·6	443·04	71·32	31·89	299·05
Flour,	8	227·2	25·9	2·26	171·76	8	227·2	25·9	2·26	171·76
Peas,	4·5	127·8	31·43	1·27	79·23	4·5	127·8	31·43	1·27	79·23
Barley,	10	284	24·14	3·12	220·25	10	284	24·14	3·12	220·95
Rice,	1	28·4	2·27	·85	22·43	1	28·4	2·27	·85	22·43
Sugar,	4·8	136·32	..	..	136·32	4·8	136·32	..	..	136·32
Jam, Treacle, &c.,	4	113·6	·34	·05	47·99	4	113·6	·34	·05	47·99
Potatoes,	52	1476·8	26·58	1·47	217·08	52	1476·8	26·58	1·47	217·08
Fresh Vegetables,	69	1959·6	27·43	3·91	94·06	69	1959·6	27·43	3·91	94·06
Tea,	1·25	35·5	..	..	..	1·25	35·5	..	..	..
Total,	..	..	930·31	506·63	3849·77	..	..	821·65	469·99	3325·36

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	132·9	72·4	550·0	3412
Female . . .	117·4	67·1	475·1	3053

The average height of the male working patient is 64 inches, their average weight 137·3 lbs.

Critical Remarks.—The dietaries of these lunatic wards are good in all respects. Their energy and proteid values are both more than the standard, the food is varied, fresh vegetables and potato are freely used, condiment is used in reasonable quantity, and an ample allowance is made for the special wants of working patients. The result of the weight test is satisfactory.

Linlithgow Poorhouse.

Breakfast.—This consists of tea, bread and butter for all. Jelly, syrup, and marmalade are sometimes given instead of butter.

Dinner.—The weekly routine includes one dinner of rice soup, one of rice soup and pudding, one of rice soup and fish, one of broth and meat, one of broth, meat and potato, one of broth and cheese, and one of pea soup and Irish stew. Bread is given with all dinners. Meat is given three times a week, and is always fresh beef, twice weekly served boiled, and once weekly as Irish stew. A completely different routine of dinners is used in warm weather, it includes ample allowances of milk and fish, but no meat other than a little used in soup-making.

Evening Meal.—All male patients get porridge and milk, and a few of them get tea, bread and butter in addition. All female patients get both porridge and milk, and tea bread and butter.

Extras for Working Patients.—Working patients get some bread and skimmed milk during the forenoon. This luncheon is occasionally varied by tea and bread with syrup, marmalade, or jelly.

Dietary for females differs from that for males by having smaller rations of oatmeal, bread, potato, meat, pudding, cheese, and fish.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	25	710	133·32	132·13	..	23	653·2	122·65	121·57	..
Mutton, ...	2	56·8	7·38	13·65	..	2	56·8	7·38	13·63	..
Fish (Fresh), . . .	3	85·2	14·22	·25	..	2	56·8	9·48	·17	..
Suet, ...	·1	2·84	·01	2·32	..	·1	2·84	·01	2·32	..
Butter, ...	4·25	120·7	1·2	102·59	..	4·25	120·7	1·2	102·59	..
Milk (Whole), . . .	80	2272	74·97	90·88	113·6	90	2556	84·34	102·24	127·8
Milk (Skimmed), . .	60	1704	57·93	5·11	86·9	60	1704	57·93	5·11	86·9
Milk (Butter), . . .	20	568	17·04	2·84	27·26	20	568	17·04	2·84	27·26
Cheese, ...	4	113·6	31·46	41·8	4·65	4	113·6	31·46	41·8	4·65
Bread, ...	118	3351·12	308·3	43·56	1779·44	105	2982	274·34	38·76	1585·44
Oatmeal, ...	42	1192·8	192·04	85·88	805·14	21	596·4	96·02	42·94	402·57
Flour, ...	4·5	127·8	14·56	1·27	96·61	4·5	127·8	14·56	1·27	96·61
Peas, Lentils, . . .	5	142	35·23	1·41	88·24	5	142	35·23	1·41	88·24
Barley, ...	6	170·4	14·48	1·87	132·57	6	170·4	14·48	1·87	132·57
Rice, ...	5	142	11·36	·42	112·18	5	142	11·36	·42	112·18
Sugar, ...	3·75	106·5	..	..	106·5	7	198·8	..	..	198·8
Treacle, Jam, &c., . .	4·50	127·8	·63	·1	104·75	4·50	127·8	·63	·1	104·75
Potatoes, . . .	46	1306·4	23·51	1·3	192·04	40	1136	20·44	1·13	166·99
Fresh Vegetables, . .	12·25	347·9	4·87	·69	16·69	12·25	347·9	4·87	·69	16·69
Tea, Coffee, . . .	1·85	52·54	..	..	..	1·8	51·12	..	..	.
Total, . .	.	..	942·51	528·05	3666·57	..	..	803·42	480·86	3149·45

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	134·6	75·4	523·8	3401
Female . . .	114·8	68·7	449·9	2954

The average height of the male working patient is 65·6 inches, their average weight 145·8 lbs.

Critical Remarks.—Both the male and the female dietaries appear to be excellent. They are of sufficient energy and proteid value, they are varied, and sufficient allowance is made for the wants of working patients. The sufficiency of the diet is corroborated by the result of the weight test, for it is found that the average weight of the male working patients is above the standard. The diets of these lunatic wards may be taken as being satisfactory in every detail.

Old Monkland Poorhouse.

Breakfast.—This for all consists of tea, bread and margarine, and porridge with skim milk.

Dinner.—The weekly routine includes four dinners of broth and meat, one of pea soup and potato, one of rice and milk and suet pudding, and one of rice and milk and meat. Bread is given daily. Meat is given five times a week, it is always fresh beef, once weekly it is served as mince, all other times boiled. Potato is used only once a week.

Evening Meal.—This consists of tea, bread and margarine for all.

Extras for Working Patients.—Working patients get tea bread and cheese in the forenoon.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	52	1476·8	270·25	279·11	..	52	1476·8	270·25	279·11	..
Fish (Salt),	4	113·6	31·01	·34	..	4	113·6	31·01	·34	..
Suet,	1·25	35·5	1·66	29·03	..	1·25	35·5	1·66	29·03	..
Margarine,	7	198·8	2·38	165·0	..	7	198·8	2·38	165·0	..
Milk (Whole),	28	795·2	26·24	31·8	39·76	108	3067·2	101·21	122·68	153·36
Milk (Skimmed),	154	4373·6	148·7	13·12	223·05	140	3976	135·18	11·92	202·77
Cheese,	21	596·4	165·35	219·47	24·45	20·3	576·52	159·69	212·15	23·63
Bread,	174·25	4948·7	455·28	64·33	2627·75	134·8	3828·32	352·2	49·76	2032·83
Oatmeal,	28	795·2	128·02	57·25	536·76	24·5	695·8	112·02	50·09	469·66
Flour,	2·25	63·9	7·28	·63	48·3	2·25	63	7·28	·63	48·3
Peas,	6	170·4	41·91	1·7	105·64	6	170·4	41·91	1·7	105·66
Barley,	8	227·2	19·3	2·48	176·76	8	227·2	19·3	2·48	176·76
Rice,	4	113·6	9·08	3·4	89·74	4	113·6	9·08	3·4	89·74
Sugar,	9·25	262·7	..	..	262·7	9·25	262·7	..	..	262·7
Potatoes,	8	227·2	4·08	·22	33·39	8	227·2	4·08	·22	33·39
Fresh Vegetables,	6·5	156·2	2·18	·31	7·49	6·5	156·2	2·18	·31	7·49
Currants,	1·25	35·5	·85	·6	26·34	1·25	35·5	·85	·6	26·34
Tea,	1·75	49·7	..	..	.	1·75	49·7	..	..	..
Total,	..	..	1313·57	868·79	4202·13	..	..	1250·28	929·42	3632·61

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	187·6	124·1	600·3	4385
Female . . .	178·6	132·8	518·9	4105

The average height of the male working patient is 65·6 inches, their average weight 153·4 lbs.

Critical Remarks.—The dietaries of these lunatic wards, both for the male and for the female patients, appear to be excessive in quantity. They both far exceed the standard, and are both very considerably larger than the corresponding dietaries of other lunatic wards and asylums. The female dietary appears to be of greater food value than any of the male dietaries of other institutions included in this report. There certainly is no underfeeding. The weight test shows the average weight of working patients to be no less than 13 lbs. more than the standard. Both dietaries contain an excess of carbohydrate. Looking at the issues of individual foods it may be noted that those of bread and beef are exceptionally large, that of the former especially so, it amounts to a daily average of nearly 25 oz. for males and 19 oz. for females. It may also be noted that the issues of some foods, viz. potato and fresh vegetable, are too small. The dinners appear to be too monotonous. A revision of these diets is desirable. Smaller but better selected diets would be found more satisfactory.

Perth Poorhouse.

Breakfast.—The majority of male patients have tea bread and butter, and porridge with skimmed milk, the remainder have porridge and skimmed milk only. The majority of female patients have tea bread and butter only, the remainder have porridge and skim milk only.

Dinner.—The weekly routine includes one dinner of rice and milk and Irish stew, three of broth and meat, and three of lentil soup and meat, with one of the latter suet pudding is also given. Bread is given daily. Meat is given seven times a week, six times being boiled beef, and once tinned mutton cooked as Irish stew.

Evening Meal.—The majority of males get tea bread and butter, and porridge and skim milk. The remainder get porridge and skim milk only. The female patients all get porridge and skim milk only.

Extras for Working Patients.—Working female patients are given a luncheon of tea bread and cheese. No extras are given to male working patients.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef, ...	30·15	856·26	168·15	161·53	..	30·15	856·26	168·15	161·53	..
Suet, ...	1·5	42·6	2·0	34·84	..	1·5	42·6	2·0	34·84	..
Butter, ...	4	113·6	1·12	96·56	.	4	113·6	1·12	96·56	..
Milk (Whole), . . .	20	568	18·74	22·72	28·0	60	1704	56·23	68·16	85·2
Milk (Skimmed), . .	210	5964	202·77	17·89	304·16	90	2556	86·9	7·66	130·35
Cheese, ...	5·33	150·52	41·69	55·39	6·17	5·33	150·52	41·69	55·39	6·17
Bread, ...	119	3379·6	310·92	43·93	1794·56	94	2669·6	245·6	34·7	1417·55
Oatmeal, ...	67	1902·8	306·35	137·0	1284·39	31·5	894·6	144·03	64·41	603·85
Flour, ...	4·05	115·02	13·11	1·15	86·95	4·05	115·02	13·11	1·15	86·95
Lentils, ...	13	369·2	94·88	3·69	218·56	13	369·2	94·88	3·69	218·56
Barley, ...	6·5	184·6	15·69	2·03	143·61	6·5	184·6	15·69	2·03	143·61
Rice, ...	6·5	184·6	14·76	5·53	145·83	6·5	184·6	14·76	5·53	145·83
Sugar, ...	4·75	134·9	..	..	134·9	4·75	134·9	..	..	134·9
Jam, &c., . . .	4·5	127·8	·76	·12	107·99	4·5	127·8	·76	·12	107·99
Potatoes, ...	19·1	542·44	9·76	·54	79·77	19·1	542·44	9·76	·54	79·77
Fresh Vegetables, . .	18·25	118·3	1·65	·23	5·67	18·25	118·3	1·65	·23	5·67
Currants, Raisins, . .	1·8	51·12	1·19	1·19	36·46	1·8	51·12	1·19	1·19	36·46
Tea, ...	1·75	49·7	..	..	..	1·75	49·7	..	..	..
Total, . .	..	..	1203·54	584·34	4377·02	..	..	897·52	537·73	3202·86

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	171·9	83·5	625·3	4045
Female . . .	128·2	76·8	457·5	3116

The average height of the male working patient is 64·9 inches, their average weight 145 lbs.

Critical Remarks.—Both dietaries appear to be in considerable excess of the requirements of the inmates. The diets are too monotonous, porridge and milk night and morning, with tea bread and butter added if wanted, boiled beef and soup six times a week for dinner. Potato is not sufficiently freely used, being only served once a week. The male diet has an excessive quantity of carbohydrate. These diets, require revision, as almost certainly smaller but better balanced diets would be found more satisfactory. The average weight of male working patients is found to be well over the standard.

Wigtown Poorhouse.

Breakfast.—This consists of porridge and skim milk for all.

Dinner.—The weekly routine includes one dinner of rice soup and cheese, one of broth and Irish stew, three of broth and beef, one of broth, fish and potato, and one of pea soup and suet pudding. Bread is given with all except the fish dinner. Meat is given three times a week, being served twice as boiled beef and once as Irish stew. Some additional meat is used in the preparation of soup.

Evening Meal.—This consists of tea, bread and butter for male patients, for female patients bread and butter with either tea, coffee, or cocoa.

Extras for Working Patients.—Females working before the usual breakfast hour get an early breakfast of tea, bread and butter. No other extras are given.

Dietary for females differs from that for males by having smaller rations of oatmeal and bread, and by having two small tea meals in the afternoon in place of one larger tea meal.

Table showing the Average Weekly Composition of Dietaries.

	MALE.					FEMALE.				
	Quantity.		Proteid.	Fat.	Carbo-hydrate	Quantity.		Proteid.	Fat.	Carbo-hydrate
	Oz.	Grms.				Oz.	Grms.			
Beef,	15·5	440·2	82·67	81·91	..	15·5	440·2	82·67	81·91	..
Fish (Salt),	8	227·2	62·02	·	..	8	227·2	62·02	·68	..
Suet,	1	28·4	1·32	23·22	..	1	28·4	1·32	23·22	..
Butter,	1·75	49·7	·49	42·24	..	3·5	99·4	·98	84·48	..
Milk (Skimmed),	105	2982	101·38	8·94	152·08	105	2982	101·38	8·94	152·08
Cheese,	2	56·8	15·73	20·9	2·32	2	56·8	15·73	20·9	2·32
Bread,	92	2612·8	240·37	33·96	1387·39	86	2442·4	224·7	31·75	1296·91
Oatmeal,	42	1192·8	192·04	85·88	805·14	35	994	160·03	71·56	670·95
Flour,	4	113·6	12·95	1·13	85·88	4	113·6	12·95	1·13	85·88
Peas,	6	170·4	41·91	1·7	105·64	6	170·4	41·91	1·7	105·64
Barley,	10	284	24·14	3·12	220·95	10	284	24·14	3·12	220·95
Rice,	2	56·8	4·54	1·7	44·87	2	56·8	4·54	1·7	44·87
Sugar,	4	113·6	..	..	113·6	7·5	213	..	..	213·0
Syrup,	·5	14·2	..	..	9·84	·5	14·2	..	..	9·84
Potatoes,	32	908·8	16·35	·9	133·59	32	908·8	16·35	·9	133·59
Fresh Vegetables,	20	568	7·95	1·13	27·26	20	568	7·95	1·13	27·26
Tea, Coffee, Cocoa,	·9	25·56	..	..	..	2	56·8	3·68	4·92	6·42
Total,	..	..	803·86	307·41	3088·56	..	..	760·35	338·04	2969·71

Food Values.—The average daily food values of the male and female dietaries are as follows:—

	Proteid.	Fat.	Carbo-hydrate.	Energy Value.
Male	114·8	43·9	441·2	2688
Female . . .	108·6	42·3	424·2	2633

The average height of the male working patients is 66 inches, their average weight 138·5 lbs.

Critical Remarks.—The diet for the male inmates of these lunatic wards appears to be deficient in quantity, as it meets neither the energy nor the proteid standards. Its energy value is nearly 20 per cent. too small, and as no special provision is made for working patients, it is not surprising to find that the average weight of male workers is decidedly below what it should be. The female dietary is only slightly below standard value, but it appears to be insufficient for workers. The issues in the male dietary of meat, butter, bread, and tea are all too small. Both dietaries require revision. The diet for the male patients of these lunatic wards is the most meagre diet recorded in this report.

V. GENERAL REMARKS ON THE DIETARIES.

I.—*Energy Value.*—Standard for males 3300 calories, for females 2650 calories.

In the following Tables there are shown the energy values of the dietaries of all the institutions where pauper lunatics are cared for. The male dietaries are there divided into three groups, the first contains those dietaries which are at least 200 calories (6 per cent.) in excess of the standard, the second contains those dietaries which are approximately of standard value, 3200-3500 calories, the third contains those dietaries which are of less than standard value. The female dietaries are similarly grouped. In the Table showing the food value of the male dietaries the results of the weight test are included for comparison. The weight test was not applied to female inmates.

Table showing Food Value of Male Dietaries and Result of Weight Test.

Institutions.	Food Value.		Weight Test.			
	Daily Average Calories.	Compared to Standard Calories.	Height. Average Inches.	Weight. Average Lbs.	Compared to Standard Lbs.	
					+	−
Group I—Excessive. Eleven Dietaries.						
Old Monkland P.H. (1)	4385	+1085	65·6	153·4	13	—
Perth P.H.	4045	+745	64·9	145·1	7	—
Banff D.A.	3934	+634	67·2	151·9	—	1
Haddington D.A.	3872	+572	66·2	140·6	—	5 (2)
Aberdeen East P.H.	3785	+485	65·5	144·2	4	—
Stirling D.A.	3745	+445	66·1	141·2	—	4 (2)
Fife and Kinross D.A.	3663	+363	65·6	143·7	3	—
Aberdeen R.A.	3612	+312	66·5	153·3	8	—
Dumbarton P.H.	3571	+271	66·3	146·9	2	—
Elgin D.A.	3561	+261	66·8	143·8	—	2
Crichton R.A.	3514	+214	66·8	141·6	—	4 (2)
Group II.—Approximating the Standard. Thirteen Dietaries.						
Govan D.A.	3488	+188	66·5	141·0	—	4 (2)
Cunningham P.H.	3474	+174	65·3	146·2	6	—
Kincardine P.H.	3412	+112	64·0	137·3	0	1
Aberdeen West P.H.	3426	+126	65·9	137·0	—	3
Linlithgow P.H.	3401	+100	65·6	145·8	5	—
Greenock P.A.	3378	+78	65·8	138·8	—	2
Edinburgh P.H.	3331	+31	66·5	143·8	—	2
Buchan P.H.	3323	+23	65·9	139·1	—	1
Dundee East P.H.	3266	−34	65·3	133·8	—	7
Lanark D.A.	3251	−49	65·9	135·9	—	4 (2)
Ayr D.A.	3234	−66	66·5	152·3	7	—
Riccartsbar P.A.	3227	−73	65·6	135·5	—	5
Argyll D.A.	3215	−85	65·6	147·3	7	—
Group III.—Deficient. Fifteen Dietaries.						
Gartloch D.A.	3192	−108	65·5	134·8	—	6
Govan P.A.	3188	−112	64·6	132·7	—	6
Inverness D.A.	3169	−131	67·0	150·6	—	1
Edinburgh R.A.	3162	−138	65·6	143·0	3	—
Montrose R.A.	3105	−195	66·4	147·5	2	—
Roxburgh D.A.	3069	−231	67·4	150·0	—	1
Inveresk P.H.	3062	−238	63·1	131·2	—	?
Dundee West P.H.	3014	−286	65·2	125·9	—	14
Kirklands D.A.	2977	−323	65·0	128·1	—	12
Dundee R.A.	2969	−331	65·0	144·1	4	—
Woodilee D.A.	2908	−392	65·0	138·1	—	2
Perth D.A.	2871	−429	66·5	139·8	—	6
Craw Road P.A.	2835	−465	64·8	137·1	—	1
Midlothian D.A.	2761	−539	65·7	137·4	—	3
Wigtown P.H.	2688	−612	66·0	138·5	—	7

(1) R.A.—Royal Asylum. D.A.—District Asylum. P.A.—Parochial Asylum. P.H.—Lunatic Wards of Poorhouses.

(2) In these instances want of special allowance for working patients explains low-weight average.

Table showing Food Value of Female Dietaries.

Institutions.	Food Value.	
	Daily Average Calories.	Compared to Standard Calories.
GROUP I.—Excessive. Twenty-five Dietaries.		
Old Monkland P.H. (1)	4105	+1455
Aberdeen East P.H.	3506	+856
Elgin D.A.	3314	+664
Govan D.A.	3265	+615
Dumbarton P.H.	3172	+522
Fife and Kinross D.A.	3121	+471
Edinburgh R.A.	3117	+467
Perth P.H.	3116	+466
Cunningham P.H.	3115	+465
Kincardine P.H.	3053	+403
Aberdeen R.A.	2976	+326
Dundee East P.H.	2973	+323
Linlithgow P.H.	2959	+309
Govan P.A.	2948	+298
Riccartsbar P.A.	2909	+259
Banff D.A.	2907	+257
Greenock P.A.	2907	+257
Perth D.A.	2886	+236
Crichton R.A.	2894	+229
Inverness D.A.	2872	+222
Stirling D.A.	2872	+222
Roxburgh D.A.	2855	+205
Craw Road P.A.	2835	+185
Argyll D.A.	2831	+181
Montrose R.A.	2822	+172
GROUP II.—Approximating the Standard. Eight Dietaries.		
Gartloch D.A.	2781	+131
Aberdeen West P.H.	2750	+100
Kirklands D.A.	2717	+67
Dundee West P.H.	2703	+53
Edinburgh P.H.	2671	+21
Ayr D.A.	2665	+15
Lanark D.A.	2644	−6
Wigtown P.H.	2633	−17
GROUP III.—Deficient. Six Dietaries.		
Haddington D.A.	2553	−97
Midlothian D.A.	2548	−102
Buchan P.H.	2503	−147
Dundee R.A.	2478	−172
Inveresk P.H.	2447	−203
Woodilee D.A.	2403	−247

(1) R.A.—Royal Asylum. D.A.—District Asylum. P.A.—Parochial Asylum. P.H.—Lunatic Wards of Poorhouses.

A scrutiny of these Tables brings out the following points:—

1. The majority of dietaries both male and female are in Groups I. and II., that is, are sufficient to satisfy the standard.

2. The number of dietaries which are classed in Group III. as deficient are greater among male than among female dietaries. 15 male dietaries, but only 6 female dietaries, are so classed.

3. Excessive feeding is more prevalent in female than in male departments. 25 female dietaries are classed as excessive, while only 11 male dietaries are so classed.

4. The variations of male dietaries are from 4385 Calories (Old Monkland Poorhouse) to 2688 Calories (Wigtown Poorhouse), or 30 per cent. over the standard to 20 per cent. below the standard. Female dietaries vary from 4105 Calories (Old Monkland Poorhouse) to 2403 Calories (Glasgow Woodilee District Asylum), or from 35 per cent. over to 10 per cent. under the standard.

5. The average of all the male dietaries is 3335 Calories, which is approximately the same as the standard, while the average of all female dietaries is 2890 Calories, or 9 per cent. more than the standard.

6. The weight test has with a few exceptions given results which corroborate the result of a comparison of the actual food value to a standard food value.

Of Group I. male dietaries, four instances only show a deficient average weight; in three of these four it is to be explained by want of any special food for workers, and in the remaining case —Elgin District Asylum—it is so small that it may be considered insignificant.

Of Group II. dietaries, nine are associated with deficient average weight, in four of them the deficiency is insignificant, 2 lbs. or less, in two the deficiency is due to want of special allowance for workers, while in three the deficiency is without apparent cause.

Of Group III. dietaries the majority are, as is to be expected, associated with deficient average weight, but there is a minority where the apparently deficient food is associated with satisfactory weighings. This minority includes three institutions, all of which are Royal Asylums. In one of these Royal Asylums—Edinburgh —the satisfactory average weight may be ascribed to the ample allowance of extra food which is there given to workers. The explanation of how in the other two Royal Asylums—Dundee and Montrose—the apparently deficient feeding comes to be associated with a satisfactory average weight is not evident.

7. A general conclusion to be got from this study of the energy value of the dietaries is that considerable improvement is possible. Some dietaries might safely be reduced, and others with much advantage increased. If the correctness of the standard adopted in this report is allowed, and the facts recorded in the schedules are correct, it appears that the food supply of male patients in 11 institutions and of female patients in 25 institutions may safely be reduced, a few materially, the remainder more or less slightly. On the other hand it appears that the male dietaries of 15 institutions, and the female dietaries of 6 institutions, require to be increased. Independent of any fixed standard the great variation found is by

itself reason for concluding that in many instances modification of the dietary scales is desirable.

II.—*Proteid Standard,* male 118 grammes, female 94 grammes. —It was pointed out earlier in this report why this test of the sufficiency of a diet is not of the same practical value as that of energy value. As a matter of fact in these studies there is not a single example of a dietary having sufficient energy and being deficient in proteid. Several have been pointed out as deficient in proteid, all of those have also been deficient in energy. Granted a reasonably mixed diet and a sufficient energy value, a sufficient proteid value may be taken for granted.

III.—*Carbohydrate Standard,* not over 550 grammes.—Excess of carbohydrate has been noted in the dietaries of three institutions only, Banff District Asylum and Perth and Old Monkland Poorhouses. In each of these three instances the dietaries are of excessive food value.

IV.—*Classification of Patients.*—It was earlier in the report explained that when there is any restriction of diet a proper classification of patients according to sex and severity of labour is essential. When the male and female dietaries of an institution are found to be approximately the same, it of necessity follows that both cannot be rightly estimated, and when it is found that working and idle inmates are given the same amount of food that also may be taken as demonstrating faulty estimation of their food requirements.

Male versus Female Dietaries.—In four institutions the dietaries appear to be faulty in that the male diet is restricted to the amount found necessary for females. These four institutions are Edinburgh Royal Asylum, Perth District Asylum, Paisley Craw Road Parochial Asylum, and Wigtown Poorhouse. In them the dietaries for the male and for the female patients are reported to be of equal or of nearly equal value, which is a condition of affairs that may be taken as a clear indication that both the male and female dietaries are not correct and that revision is called for.

Working versus Idle Patients.—In discussing the dietaries of the individual institutions it was in five instances necessary to adversely criticise on account of insufficient special allowance for active workers, where all other matters were satisfactory. In each of these five instances the weight test showed workers to average less than standard weight. These five instances were Crichton Royal Asylum, and Govan, Haddington, Lanark, and Stirling District Asylums. In each of these institutions the feeding would be materially improved by giving extra food to workers. The weight returns from Glasgow Woodilee District Asylum are instructive as showing how active work increases food requirement. The diet there does not comply with the standard and the average weight of all male workers is below the standards by 2 lbs. The most actively worked inmates of that asylum reside at a farm, they receive no extra food, and what appears to be the result of the insufficient diet combined with active work is that they average no less than 9 lbs. below the standard, or half a stone less than the less actively worked men in the same asylum.

V.—*Division into Meals.* — Under this head little adverse criticism of the institution dietaries has been given. An excessive breakfast in Buchan Poorhouse has been remarked on, and an increased allowance of food for breakfast has been suggested in some other institutions.

VI.—*Variation of Food.*—The want of proper variation of food has been remarked on when discussing the dietary of several institutions; more especially was this noted about Aberdeen Royal Asylum, Paisley Craw Road Parochial Asylum, Aberdeen West Poorhouse, Dumbarton Combination Poorhouse, and Perth Poorhouse. The more frequent causes of monotony of feeding appear to be excessive use of porridge and unvarying boiling of beef. Porridge and milk is doubtless splendid food and its use should be encouraged in all institutions, but two exclusively porridge meals daily are on account of their monotony to be condemned. The unvarying boiling of beef is a fault that should be easily rectified.

Another matter which I have had occasion to adversely criticise is the too frequent use of tinned meat, for that must inevitably lead to monotony. The dietaries of the District Asylums of Perth, Fife and Kinross, and Stirling are faulty on this account. At Perth District Asylum tinned meat is reported to be used three times as often as fresh meat.

After drawing attention to faults of some of the dietaries in point of quantity it is only right to add that in many no adverse criticism of the variation and quality has been made. The dietaries of the two Glasgow asylums, Gartloch and Woodilee, and of the Govan District Asylum may be selected as specially good in respect of variation and quality. In these institutions great care has evidently been taken to ensure that the inmates are pleasingly fed.

The matter of variation of food will be referred to when making suggestions for securing the sufficient and proper feeding of all pauper lunatics.

VII.—*The Use of Condiments.*—In the dietaries under consideration, other than mustard, pepper, etc., tea is found to be the only condiment used habitually. This is as it should be, as it is now an essential part of all dietaries, and a very necessary part of the dietaries of persons under the depressing influence of asylum treatment. Loss of liberty must be depressing. In several institutions the dieting has been found fault with on account of the insufficient use of tea. That was done in the cases of Aberdeen Royal Asylum, Banff and Haddington District Asylums, and in several poorhouses.

VIII.—*The Use of Potato and Fresh Vegetable.*—The use of these in the great majority of institutions has been found sufficient, but in a minority insufficient. The institutions which can be selected as using potato and fresh vegetable in the most insufficient quantities are Paisley Craw Road Parochial Asylum, and Old Monkland Poorhouse, in the former the average use of the two combined is under 1½ lbs. weekly, in the latter less than 1 lb. weekly.

VI. SUGGESTIONS FOR ENSURING THE PROPER FEEDING OF PAUPER LUNATICS.

In making critical remarks of the individual dietaries various suggestions for improvement have been made. I propose now to supplement these by drawing up a scheme of what I consider should be the essentials of asylum feeding. It is not my intention to draw up a weekly bill of fare, as such detail may well be left to the management of the individual institutions.

1. *Bread should be given ad libitum with all Meals.*—Bread is the basis of ordinary diets, and should be freely used. An unlimited distribution of it with every meal will go far to ensure that every patient will receive a sufficiency of food. This I consider is an improvement called for in nearly all the asylum dietaries. There is little fear of the majority of the inmates abusing such discretionary power and wasting unduly.

2. *24 oz. of Meat, uncooked without bone, should be the minimum weekly allowance.*—This minimum allowance is intended to be sufficient for four meat dinners weekly. A proper supply of meat is wholesome, is necessary to counteract the proteid deficiency of bread, and is desirable to give proper variation of food.

3. *A fish dinner or a fifth meat dinner should be given weekly.*—The advisability of a fish dinner is open to question; in some institutions it appears to be appreciated as being a variety, but in others that is not so. For a fish dinner the minimum allowance of fresh fish should be 12 oz. (dressed), and that of dried fish 6 oz. When a fifth meat dinner is given the minimum weekly allowance of meat should be increased to from 24 oz. to 30 oz.

4. *Porridge and Milk must be given at least once daily.*—This national dish without a doubt should be freely used, it is cheap food, and is of special value in counteracting the proteid deficiency of bread. It also makes variety. Suggestion No. 1 if adopted will prohibit the exclusive porridge meals at present used in many asylums, and will permit of other food being secured for patients who, on account of dyspepsia or for other reason, are unable to eat porridge.

5. *The minimum weekly allowance of Potato should be* 3 *lbs., of other Fresh Vegetables* $1\frac{1}{2}$ *lbs.*—These minimum allowances will secure that patients receive a sufficiency of antiscorbutic food, and will assist in securing proper variety of food. The potato allowance should be sufficient for three services weekly. The vegetable allowance should be sufficient to provide for four services of well-seasoned broth and one service of a meat and vegetable stew.

6. *Tea or Coffee or Cocoa should be served ad libitum to Patients twice daily.*—I am strongly of opinion that a proper use of these condiments is essential. The stimulating properties of these beverages will help to counteract the flagging appetites caused by the depressing influence of confinement. The minimum weekly allowance of tea per inmate to secure two services daily should be 3 oz. That minimum need not be insisted on when coffee or cocoa is substituted.

7. *The minimum weekly allowance of Butter should be* 5 *oz.*—Butter or margarine, like tea, is universally used and doubtless should be included in asylum dietaries in reasonable quantity. It is of value in increasing the food value of the bread, and as a condiment to the bread. The use of butter in the dietaries is reported to vary enormously, the extremes are found at Montrose Royal Asylum, Old Monkland Poorhouse, and Aberdeen West Poorhouse; at the first two it is 7 oz. a week, at the last it is only 1·4 oz. a week. I am of opinion that 5 oz. would be a reasonable and not excessive minimum, and is one that will not entail a material increase in the majority of the asylums where the diet is reasonably good.

Margarine of a good quality may safely be used in place of butter, experience has shown it to be a good food and not disliked by the patients. One stipulation, however, is desirable when margarine is used, and that is that the weekly minimum allowance should be increased, and the reason for that is that it is found that margarine "does not go so far as butter," it is softer and soaks into the bread, and consequently if sparingly used does not give the same appetising appearance as butter, A minimum weekly allowance of margarine should not be less than 6 oz.

8. *The proper variation of diet should be insisted on.*—For variation of institution dietaries, variation of the dinner must to a great extent be depended on, and to secure that I would suggest the following:—

a. No individual soup, broth excepted, should be given oftener than twice weekly.

b. The meat and the cooking of it should be varied. Boiled beef should not be served oftener than thrice weekly.

c. Puddings should sometimes be given, these must be sweetened or flavoured.

d. The same dinner must not be given oftener than twice weekly.

e. The weekly routine should be periodically revised and made to include seasonable dishes. Rhubarb, apples, etc., should be used when readily procurable.

9. *Extra Food for Working Patients.*—Suggestion No. 1 should to a great extent meet the special requirements of the more severely worked inmates, but as it has been found by experience in asylums that a luncheon is wholesome and appreciated, I am of opinion that it should be given to all inmates who do a moderate day's work.

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24 Stafford Street,
Edinburgh, *December* 1901.

Glasgow: Printed for His Majesty's Stationery Office
By James Hedderwick & Sons.